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The OIL WEEKLY

OIL and GAS ENGINEERING

INTERNATIONAL AUTHORITY FOR THE PRODUCING AND PIPE LINE INDUSTRY

THE WEEK'S NEWS INTERPRETED

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OCT 28 1944

State Capitol Building, Springfield, Illinois

38,977,000 BARRELS OF OIL FROM ILLINOIS FIRST HALF OF 1944

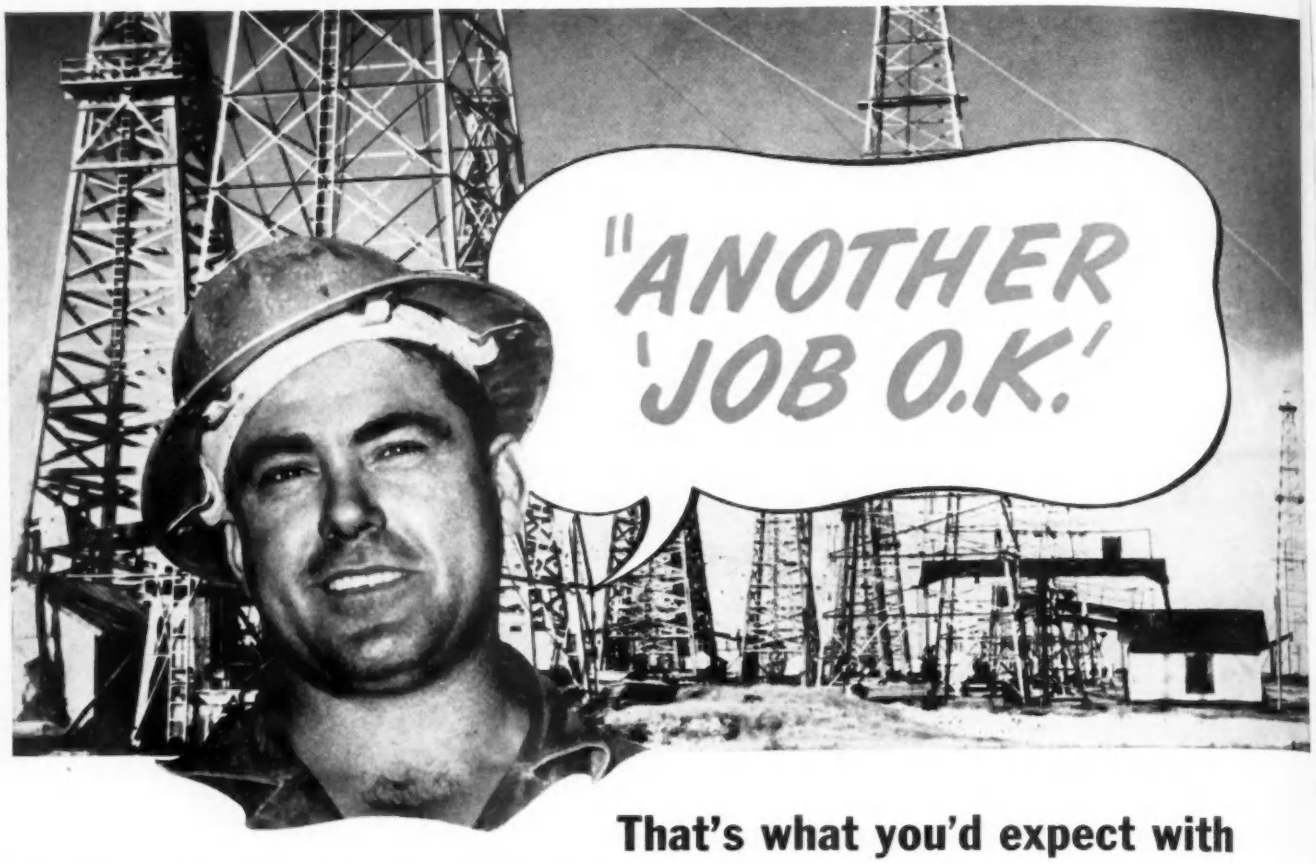
While the presence of petroleum in Illinois had been known since 1853 or later, the real development began in 1905 with the discovery of oil near Casey, Clark county.

Deeper sands in many southeastern Illinois counties were developed, and the total production spiralled rapidly upward—in 1905, 181,000 barrels of oil were produced; in 1908, production totalled 34,000,000 barrels; and during the period 1907 through 1914, Illinois ranked third among the oil-producing states.

Additional discoveries during the late 1930's revived the Illinois area, and during the first six months of 1944 this state produced some 38,977,000 barrels of crude.

We salute the Illinois Oil Industry, and take pride in the part Hughes Tools have played in its development.

HUGHES TOOL COMPANY
HOUSTON, TEXAS



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Whether your next job is deep and hot, or just routine, cut down the risks with *Improved* Unaflo. Get it from your dealer, or write to Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Amicable Building, Waco; Oklahoma City; Kansas City; Chicago; Birmingham. For performance data on actual jobs ask for a copy of the book, "Case Histories of Oil-Well Cementing."

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OW-U-53

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☆

LOOKING AHEAD
... with the Editor

NEARLY three years after its discovery the Willamar field in Willacy County, Southwest Texas, gives promise of becoming one of the major districts in that area.

At the end of September there were 56 producing wells, 10 rigs running, with only one dry hole completed. From this development coupled with subsurface and geophysical data, the producing area will ultimately cover at least 10,000 acres.

But for the curiosity of men in charge of operations on this discovery well, who sought an answer to the question of why sand at 7600 feet should carry water which was definitely brackish but was not oil-field brine, the field might never have been discovered. The section now producing was never cored and showed no oil on initial tests.

Production is from the upper 200 feet of the Frio sand.

Slow development of the field was the result of a number of handicaps including a limited market demand due to characteristics of the oil itself, wartime shortage of materials, and lack of an economical outlet for the crude.

These disadvantages have been overcome and development is now progressing as fast as conditions will permit. In an early issue, a complete survey of the field will be presented, including a brief history, to bring information on this important discovery up to date.

THE OIL WEEKLY

ENGINEERING • NEWS • STATISTICS

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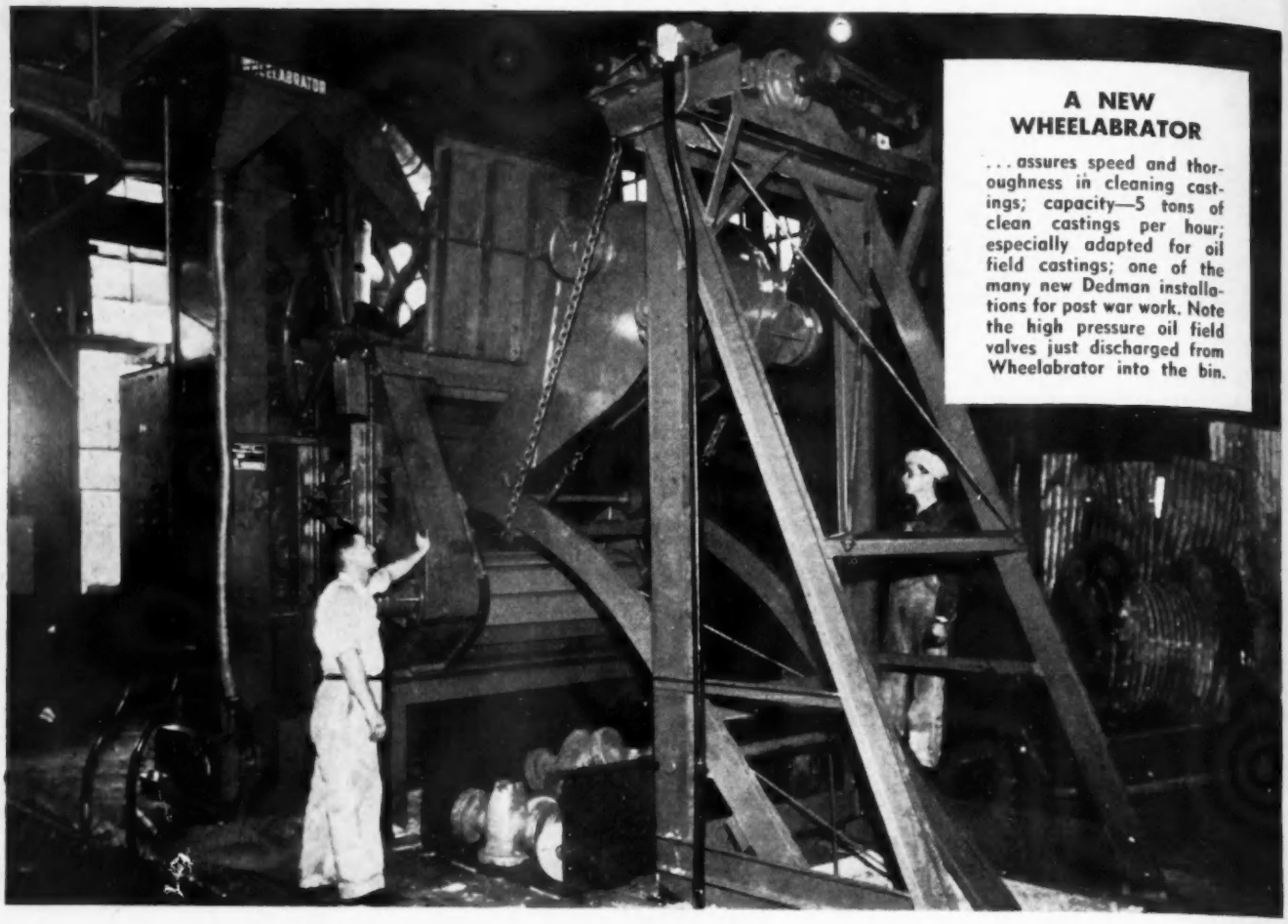

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The Changing Panorama

Postwar Shipping Concerns Oklahoma

IN TULSA recently, 300 business and civic leaders were told that economic and military security for postwar America will be somewhat dependent on our decision to maintain a strong merchant marine. The meeting was unique in that it was held in a state whose boundaries touch no ocean.

Chief importance of the gathering was that it focused attention of Oklahomans on themselves as participants in a world economy. The war has brought some insight to global interdependence of people, and has given many individuals their first introduction to thinking in global terms. It is to be hoped that this trend will not diminish when peace is won.

An aggressive merchant marine will be fundamental in promoting world-wide trade in the era to follow when the war is over. "Oklahoma," one of the speakers said, "as a great oil center of the world, is dependent upon tankers —ships to move that oil to markets throughout the world. As a commercial domain, Oklahoma needs ships to carry cereals, tobacco, peanuts, pecans, fruits and many other products of the soil. There are thousands of other cities in the United States, which, like Tulsa, have products to be disposed of in world trade, and each has a vital stake in the postwar merchant marine. Some are industrial, some agricultural, but to each the American merchant fleet offers the open door to prosperity and the key to security."

Formula Saves Oil in Fighting Mosquitoes

A CHEMICAL formula that saves as much as 34 gallons of diesel or stove oil per acre in spraying swamp lands and stagnant pools to kill mosquito larvae, has been developed. An emulsifier known as Triton B-1956, this "oil stretcher" makes mosquito control oil go seven times further, and is said to be 100 percent effective in killing freshwater mosquito larvae.

The formula grew out of the United States Department of Agriculture's program of mosquito control investigation being carried out in the interest of health and welfare of armed forces and civilians.

Thank You . . .

WHILE I have tried to give personal replies to all of the letters and wires regarding the editorial "So Help Me God" which appeared in THE OIL WEEKLY, October 9, it now becomes apparent that the number is so great that I shall not be able to answer each one. To all who have written, wired or called me approving the editorial (none have condemned it to-date) I wish to express my deep appreciation. To any one who wishes to have reprints made, or to republish it in any newspaper, this may be considered full permission for such reprinting. All that I ask is that the text not be changed.

RAY L. DUDLEY, publisher
THE OIL WEEKLY.

Need for State Gas Regulation

WE WISH to call the attention of those who may have missed it to the article entitled "Arkansas Gas Condensate Law" which appeared in THE OIL WEEKLY of October 16 (Page 30).

Necessity for sound, practical legislation dealing with natural gas production and condensate well operations, is to be found in several states. While the Arkansas law is not perfect, it is declared to be the best actually on the statute books to this time.

Operators in every state needing improvement of its gas-condensate laws should study it and work toward the passage of similar legislation. If this is not done, the industry may find itself in difficulties and the state regulatory bodies in such states as may need the legislation, may be shorn of their powers.

Production of high alloy seamless tubes for submarine radio antennae masts, periscopes and other long tubes has increased by 50 percent the weight of tube which could be produced as a unit before wartime demands stepped up the limits. This increase in maximum units is expected to aid in meeting down-the-well corrosion problems after the war by making available one-piece units, to take the place of present assemblies.

Tax Administration Troubles Industry

SIXTY percent of industry is troubled by the administration of federal tax laws, as indicated by a survey recently concluded by the National Association of Manufacturers.

Tax questionnaires were mailed out during the summer months. Up to this time more than 3000 replies have been digested and classified as follows:

Firms listing serious problems in tax administration totaled 1369, or 42.05 percent of the total replies received; companies listing some problems in administration totaled 711, or 21.85 percent of the total replies; firms that had law problems totaled 874, or 26.86 percent of the total replies; and companies satisfied with administration, totaled 301, or 9.24 percent of the total replies.

Both the Treasury and Bureau of Internal Revenue were informed that the poll was being taken and were "most cooperative in all contacts with them."

"It would be unfair," the director of the survey said, "if our report were interpreted as a criticism of the good faith of these officials. On the contrary, we are convinced that the officials are desirous of doing a good job and in general are fair-minded, intelligent and hard working."

The report called attention to the fact that "there must be many billions of funds involved in undefined tax obligations. The financial positon of many companies has become vague and indefinite, depending on the magnitude of the sums which may belong either to a company or to the government. This unsettled situation is not conducive to agressive postwar business activities or to complete postwar employment."

Russia Looms in The Oil Picture

RUSSIA'S position in postwar international oil circles may be much more important than generally realized at this time. Only meager information on Russian oil developments have reached this country since she went to war; however, all signs are that surprisingly large gains in production have been achieved. This possibility raises the question of whether the Soviet will become an oil exporting nation in postwar years. If so, the volume of foreign oil seeking international markets may

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OIL FIELD EQUIPMENT AND SUPPLIES

be enlarged substantially beyond the quantity now expected to come from increased output of the Near East and Venezuela, and thereby further complicate postwar oil conditions.

Harry T. Brundidge, writing in the October issue of **Cosmopolitan,** says Russia suggested at the Teheran conference between Roosevelt, Churchill and Stalin that its share in postwar export oil markets be about 400,000 barrels daily. Before the war Russia was producing nearly 700,000 barrels daily, and consuming practically all of it at home!

In view of the vast reconstruction program ahead of Russia, it would appear her own oil needs would be greater than before the war. But her production may have increased sufficiently to permit her to begin large exportation, or her need for foreign exchange to conduct the reconstruction program may make it advantageous to export oil. All signs indicate Russia has increased her production of oil materially since the war. It is known for instance, that through lend-lease the United States has given Russia 12 complete refineries in the last two years. It is known that Russia's ability to conduct a continued offensive war employing mechanized units on a lengthy battlefront has required much oil, and she has supplied most of it herself.

Russian reports tell of the discovery of more than 100 new producing fields since the start of the war. Most of these are in the Ural-Volga area, to which region she moved drilling rigs and crews from the Grozny and Baku districts when the Germans threatened to overrun the Caucasus region. In addition, several government operating combines have been cited for unusually large production increases during the first half of 1943 as compared with the first half of 1941.

Buyers Put Autos at Top of Postwar List

THE automobile stands first among postwar buying plans, as shown by a survey recently completed by Crowell Publishing Company. Based on 3646 carefully supervised personal interviews in 39 cities distributed across the country in proportion to the population, three times as many people want to buy an automobile first after the war as want to buy a new house first. Among the people interviewed, 56 percent are planning to buy an automobile after the war; 34 percent say it will be the first thing they will buy; and 12 percent say it will be the second item on their buying list.

The Question of A Gas Return Bonus

THE granting of bonus oil for return of salt water to the reservoir in the East Texas field is regarded as sound conservation practice. This is a water-drive field, and return of water increases present and ultimate recovery, making secondary recovery run concurrently with primary methods. The bonus oil is an added incentive, paying the cost of injection and at the same time increasing ultimate return from the property.

The question has been asked "why would it not be just as reasonable to institute a policy of granting a bonus of a barrel of oil for a certain quantity of gas returned to the reservoir in fields whose principal reservoir energy is gas?" As in the case of East Texas, it would be simply returning the energy to the reservoir, with the bonus paying injection costs plus a small profit and insuring an ultimately greater return from the property. Flowing life of wells will be greatly increased and operations will re-inject the same gas time after time, receiving the same bonus each time. In addition, the gas will be kept for the future in the only possible storage medium—the ground.

Oil Pact Foreshadows Danger to Every Man

THE importance and probable influence of the Anglo-American oil agreement reaches far beyond the scope of the petroleum industry, and in fighting it the industry should awaken the entire nation to the danger it implies to every citizen and all businesses.

The import of the agreement to the general public and the nation as a whole has been ably and forcefully presented by George A. Hill, Jr., and a few others, and need not be repeated here. But the general public should be informed that the oil agreement undoubtedly is the forerunner of many similar agreements on other commodities, for the Atlantic Charter did not specifically mention oil but stated that the raw materials of the world were to be made available, on equal terms, to all nations.

If this idea is to be carried out on the same basis as the proposed oil agreement, which provides for fixing of world production quotas, for allocation of world markets, and for fixing of prices, it means government control of all raw materials—not just oil. Bureaus, including an international OPA, would have to be established to carry out such principles. The public also should be told that the President proposes to make the agreement a treaty, for he has submitted it to the Senate for ratification. If approved it would become a treaty, and therefore the supreme law.

The public needs to be aroused to these highly dangerous possibilities. This is everyone's job, not the duty of just a few public-spirited men like George Hill. Only if everyone is alert to the task can warning be given in time to keep Washington from forgetting that such powers are not invested in the federal government under our Constitution.

Letters should be written to Senators, newspaper editors should be contacted, and neighbors and friends outside the industry should be informed. Such action must be taken now, and by everyone.

Burning Backlog of Scientific Knowledge

WAR is burning up America's backlog of scientific knowledge and is not stimulating research and invention as is generally believed, the National Association of Manufacturers believes.

Not since the first decade of the century has the number of applications for patents and the total of patents granted fallen to the low point of today.

R. J. Dearborn, president of Texaco Development Corporation, and chairman of the National Association of Manufacturer's committee on patents, said: "War stimulates the application of accumulated knowledge rather than the pioneering on the frontiers of science and technology. We are burning up the backlog of scientific knowledge during the war just as we are using up our natural resources. To prevent a decline in the normal rate of scientific and technological progress, incentive must be provided for research and invention. This means that patent protection will be more important than ever before, because only through patent protection can a new idea be transformed into a useful product or service for the consumer."

Only 14,000 patents were issued during the first six months of 1944, according to *Industry's View,* a NAM publication. This represents a reduction of more than 30 percent from the 21,000 patents issued for the same period in 1939. The rate of decline, according to the publication, in patent application is even greater than the decline in patents issued. This is in pointed contrast to the general public belief that war stimulates invention and research.

*A sledgehammer to drive a tack?

That's what it amounts to if you're using heavy, oversized equipment for a few barrels of oil per day. It's costing you a lot of needless dollars and man-hours, both in operating and maintenance work.

For the most economical installation, call a Bethlehem Supply engineer. He'll recommend the right combination of engine, pumping unit, sucker rods, pump, and auxiliary equipment for the job you have to do.

When properly engineered, the modern rod system of pumping is the most economical method yet devised. Modern equipment design insures highest overall efficiency. Let Bethlehem help you design your complete installation.

*Or a tackhammer to drive a spike? It's just as bad to overload too light equipment.

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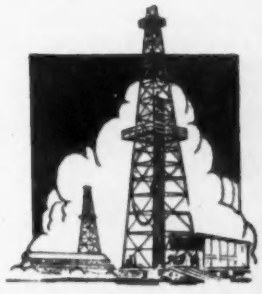
WASHINGTON ROUNDUP



By BERTRAM F. LINZ, Washington Correspondent

CRUDE production, cut back this month, will again move upward in November, although it will not regain all the ground lost, under PAW certifications calling for daily production of 4,720,500 barrels of crude out of a total of 5,023,900 barrels of all petroleum liquids.

Campaign Uppermost—The quiet week in Washington reflected the absorption of administration officials with matters political. Administrator Ickes returned from another speech-making swing around the West, but had little to talk about other than Governor Dewey, reporters gathering that he did not care much for the Republican candidate, whose election would make it necessary for the present Secretary of the Interior to look for a new job.

Anglo-American Oil Pact—It is understood that the State Department will shortly undertake to revise the Anglo-American petroleum agreement in order to alleviate fears of the industry that it is intended to put the government into an international cartel or impose federal regulations on the industry.

Butane Ban, Texas Prices—Such developments as did occur were in the realm of the routine and most of them merely preparatory for definite action in the near future. In this category came plans of PAW to ban the use of butane for drilling operations where natural gas is available and revision of the critical list of petroleum products to eliminate priorities for crude now enjoyed by some of the refiners of 87-octane gasoline which would spread available crude supplies a little better. In OPA, plans were being laid to schedule dollar-and-cents maximum prices for all grades of Texas crude down to 21 degrees.

Gasoline Rationing Prospect—Just how the end of the European phase of the war will affect civilian gasoline rations is still a matter of debate, with Deputy Administrator Davies warning that after Germany's defeat there will be a brief period of decline in military requirements, followed by an upswing when the war in the Pacific gets on an all-out basis. But Davies promised that if any gasoline is available, it will be released for consumption.

DPC Sale and Lease Plans—Hundreds of plants and facilities which the Reconstruction Finance Corporation financed and to which the Defense Plant Corporation holds title, including some sixty gasoline and rubber plants, three pipe lines and a number of grain-alcohol plants, are listed in a catalog issued by secretary of Commerce Jesse Jones, with an announcement that DPC will negotiate at any time for their purchase or lease by private interests although no date can be set for turning now-operating plants over.

Government-Owned Oil and Rubber Plants to be Leased or Sold Listed

Details of approximately 60 oil and rubber plants and of several alcohol plants which the government will offer for lease or purchase are incorporated in a 150-page catalog of government-owned plants and sites which are to be disposed of after the war, issued by Defense Plant Corporation.

Denominating the list as a "briefalog," Secretary of Commerce Jesse Jones explained that its purpose "is to give those interested in industry advance information as to the size, character and location of its plants so that when any of them are declared surplus and no longer necessary in the war effort, they can be converted to civilian production through lease or sale with all possible speed and the least possible loss of employment."

It was announced by DPC that negotiations for purchase or lease of the properties will be entered into, subject to contingencies of present contracts and length of time the plants will continue in war use.

Included in the list were the following plants:

Lion Oil Refining Company, El Dorado, Arkansas: Butadiene production palnt consisting of 3.662 acres, all but 0.643 acres owned by the company, with buildings and machinery.

Root Petroleum Company, El Dorado, Arkansas: 100-octane aviation gasoline production plant of 23,875 acres, all but 7.34 acres owned by company, with buildings, machinery and equipment.

Goodyear Synthetic Rubber Corporation, Los Angeles: Rubber production plant consisting of 84.2 acres, with buildings and machinery.

Mohawk Petroleum Corporation, Bakersfield, California: Refinery, consisting of 20 acres of land and 16 buildings and machinery, including isopentane splitter unit, reformer unit, gas concentration unit, caustic wash unit, alkylation unit, isomerization unit, tankage, boiler plant, water system, ethyl buil ling plant, etc., also one Chevrolet sedan.

Standard Oil Company of California, El Segundo, California: Improvements erected on property owned by the company, including reactor, compression and absorption and extraction systems, with 267 pieces of equipment.

Wilshire Oil Company, Norwalk, California: Refinery plant on 20.64 acres, with 28 buildings and 1459 pieces of machinery and equipment.

Bay Petroleum Company, Denver, Colorado: Additional facilities for manufacture of a mixture of normal isobutane and butylenes, with no buildings but four functional units consisting of debutanizer, depropanizer, storage tanks and tank carloading and truck transport loading facilities.

Office of Defense Transportation, Jacksonville, Florida: Plant for construction of wooden barges, steel tugs and oil terminals; terminals to be operated by the General American Transportation Company.

Trans-Florida Pipe Line: 148,773 acres, covering unloading dock at Carrabell terminal, six stations and Jackson terminal; 198.2 miles of used pipe, four diesel and three electric pump stations.

Plantation Pipe Lines: Approximately 175 miles of eight-inch pipe line from Greensboro, North Carolina, to Richmond, Virginia, with four pumping stations, etc.

National Refining Company, Coffeyville, Kansas: Refinery plant on 11.9 acres, with six buildings and 250 pieces of production equipment and 100 portable tools.

Ashland Oil & Refining Company, Ashland, Kentucky: Refinery plant on 101.06 acres, with 29 buildings and complete production machinery.

B. F. Goodrich Company, Louisville, Kentucky: Two plants on 34.2005 and 45.249 acres of ground, respectively, for rubber production, one consisting of 25 buildings comprising a 60,000-ton plant

for production of Buna S, the other of 10 buildings with machine shop equipment.

Cities Service Refining Corporation, Lake Charles, Louisiana: Eight buildings with 1946 pieces of production equipment.

Firestone Tire & Rubber Company, Lake Charles, Louisiana: 21 buildings on approximately 82.6 acres, for rubber production.

Firestone Tire & Rubber Company (Copolymer Corporation), Baton Rouge, Louisiana: 15 buildings on 34.37 acres with 451 pieces of production machinery and equipment.

Premier Oil Refining Company, Cotton Valley, Louisiana: Plant for production of alkylate consisting of eight buildings on 35 to 40 acres, fully equipped.

Standard Oil Company of Louisiana, Baton Rouge, Louisiana: Refinery plant consisting of 10 buildings on 35.96 acres, with 1187 pieces of machinery and equipment.

Standard Oil Company of Louisiana, Baton Rouge: Refinery plant consisting of 18 buildings on 39.28 acres, with over 3000 pieces of machinery and equipment.

Standard Oil Company of Louisiana, Baton Rouge: Toluene plant consisting of four buildings on 7.89 acres with 475 pieces of machinery and equipment.

Standard Oil Company of Louisiana, Baton Rouge: Filter, pelloting and firing buildings, with warehouse and office, on 65,000 square feet, with 93 pieces of production equipment.

Houdry Process Corporation, Paulsboro, New Jersey: One building on five acres, with an indeterminate quantity of production machinery and equipment.

Ohio Listings

Firestone Tire & Rubber Company, Akron, Ohio, 7 buildings on 17.3 acres, authorized for production of synthetic rubber, with no production equipment.

Goodyear Tire & Rubber Company, Akron, Ohio: 7 buildings on 16.16 acres with complete production unit, authorized for the production of synthetic rubber from butadiene and styrene.

Sun Oil Company, Toledo, Ohio: Refinery equipment on 4.34 acres, including five buildings with 222 pieces of production equipment.

Anderson-Pritchard Refining Company, Cyril, Oklahoma: Refinery plant of two buildings, no land owned by DPC, with 39 pieces of production equipment.

Associated Refineries, Inc., Beckett, Oklahoma: Refinery of 32 buildings, 12 dwellings and six garages on approximately 80 acres, with an estimated 1500 pieces of equipment.

Continental Oil Company, Ponca City, Oklahoma: Refinery plants (2), one consisting of three buildings on 4.78 acres with 95 pieces of equipment, adjoining 27 buildings on 28.65 acres, with 495 pieces of production equipment.

Pennzoil Company, Oil City, Pennsylvania: Refinery of 12 buildings on 6.967 acres, with 33 production vessels, 60 pumps, 19 tanks and 225 miscellaneous tools, authorized to produce 100-octane aviation gasoline.

Many in Texas

J. S. Abercrombie and Harrison Oil Company, Sweeny, Texas: 27 buildings on 454.14 acres, with all machinery necessary for crude topping, reforming, gas concentration, cracking, alkylation units.

Crown Central Petroleum Corporation, Houston: Refinery plant of seven buildings on 8.4946 acres, with production machinery.

Dow Chemical Company, Velasco, Texas: Styrene plant of 41 buildings on 237 acres, with 54 units.

Eastern States Petroleum Company, Inc., Houston: Refinery plant of 11 buildings on 29.47 acres, complete for catalytic cracking, gas concentration, alkylation isomerization.

Eastern States Petroleum Company, Inc., Houston: Refinery plant of five buildings on 36.9 acres, complete for operation of a depropanizer, solvent make-up tower, absorber, etc.

B. F. Goodrich Company, Borger, Texas: Synthetic rubber plant, butadiene styrene copolymer type, of 16 buildings on 80 acres, with approximately 4014 pieces of machinery and equipment.

B. F. Goodrich Company and Firestone Tire & Rubber Company, Port Neches, Texas: Synthetic rubber plant of 40 buildings on 124 acres, with necessary tools.

Goodyear Synthetic Rubber Corporation, Houston: Synthetic rubber production plant of 36 buildings on 403.59 acres, with machinery necessary for styrene storage, chemical storage, butadiene purification, pigment preparation, reactor building "C," recovery building "D" and rubber processing buildings.

Goodyear Tire & Rubber Company, Baytown, Texas: Buna S production plant of 14 buildings on 47.81 acres.

Humble Oil & Refining Company, Baytown, Texas: Butadiene production plant (30,000 tons annually) of 12 buildings on 81.34 acres, with necessary production machinery.

Humble Oil & Refining Company, Baytown, Texas: Refinery plant of 16 buildings on 58.3 acres, with necessary production equipment.

Humble Oil & Refining Company, Ingleside, Texas: Plant of 11 buildings on leased land, with 250 pieces of equipment.

Humble Pipe Line Company: Authorized to provide a pipe line from southwest Texas to Houston, 43 buildings, two tracts of land held in fee and three acres leased, with 180 pieces of production equipment.

Magnolia Airco Gas Products Company, Houston: One buildings on 0.38 acre with production machinery consisting of fractionating columns, compressors, drying unit, soda and cooling towers, etc.

Monsanto Plant

Monsanto Chemical Company, Texas City, Texas: Styrene manufacturing plant of 25 buildings on 24.63 acres, with all necessary machinery.

Magnolia Petroleum Company, Beaumont, Texas: Toluene plant of 10 buildings on 18.66 acres, with 15 units of machinery and equipment.

Neches Butane Products Company, Port Neches, Texas: Refinery equipment in 23 buildings on 458.7 acres with production machinery consisting of fractionating towers, process pressure vessels, reactors, compressors, etc.

Phillips Petroleum Company, Borger, Texas: 30 buildings on 646.8 acres, including hospital, community building, business block, dwellings, etc., with welding shop, catalyst storage, water treater building, etc., and an estimated 8035 pieces of machinery and equipment.

Pure Oil Company, Smith's Bluff, Texas: Isomerization unit, etc., in 12 buildings on 4.42 acres.

Republic Oil Refining Company, Houston: 100-octane gasoline and associated products plant in eight buildings on 15.63 acres with necessary production machinery.

Sinclair Rubber Company, Houston: Rubber plant consisting of 19 buildings on 403.59 acres with all production machinery necessary for five acres, constituting a complete independent unit except for feed stocks.

Southport Petroleum Company, Dallas: 100-octane gasoline plant in 16 buildings on 34.7 acres with all necessary production machinery.

Southport Petroleum Company, Texas City, Texas: Towers, pumps, tanks, compressors, etc., but no buildings and no land owned by DPC.

Taylor Refining Company, Corpus Christi, Texas: Refinery equipment in six buildings on 1.25 acres.

Utah Oil Refining Company, Salt Lake City, Utah: 100-octane gasoline plant dependent upon outside sources for raw stock, steam and water, in 22 buildings on 27.13 acres with 255 pieces of production equipment.

Frontier Refining Company, Cheyenne, Wyoming: Plant and housing units of 58 buildings on 40 acres, with machinery and equipment to produce 100-octane gasoline.

Some Refineries to Lose Priorities for Crude

Revision of the list of critical petroleum products to be made shortly by PAW will deprive some refineries now making 87-octane gasoline of their priorities for crude and spread the crude supply among refiners making lower grades.

There is currently less demand than hitherto for 87-octane gasoline, and the cutting back of its production will make for better distribution of crude for refiners not making military grades. Only a limited number of 87-octane refiners is expected to be taken off the priority list.

Milton New President Of Houston Geological

William B. Milton, Jr., of Gulf Oil Corporation was elected president of the Houston Geological Society at the October 19 meeting. He succeeds Leslie G. Boling, of Union Oil Company of California. Other officers elected were William B. Moore of The Atlantic Refining Company, vice-president; Charles H. Sample of H. M. Huber, Inc., secretary; Homer A. Noble of Magnolia Petroleum Company, treasurer, and an advisory committee composed of Ira A. Brinkerhoff of Texas Gulf Producing Company, Charles E. Lake of Tide Water Associated Oil Company, and Martin M. Sheets of Stanolind Oil & Gas Company.

Park J. Jones, production consultant, spoke on "Cycling Reservoir Gas," and gave pertinent data necessary for efficient cycling operations, both from the standpoint of ultimate recovery and economic operating conditions. Jones predicted that cycling will revolutionize the production branch of the oil industry, and that unit operation will ultimately replace competivtive operation.

IPAA Members Approve Directors' Resolutions

Members of the Independent Petroleum Association of America in various sections of the United States last week approved action of the association's board of directors in condemning the Anglo-American oil agreement. Section meetings of IPAA members were held at San Antonio, Corpus Christi, Houston, Tyler, and Shreveport during the week. At each members gave full approval to the resolution drafted by directors at their annual meeting in Dallas on October 9-10-11, which asked the Senate not to ratify the agreement.

The conferences heard Ralph T. Zook, association president, and Russell B. Brown, association counsel, discuss problems confronting independent oil producers.

Zook declared that the petroleum agreement between the United States and the United Kingdom was but another "step to undermine our constitutional government and is a path to federal control over the oil industry," which would mean the complete end of state regulation of the oil industry.

Zook, pointing out the large increases in foreign oil production since the war, warned that domestic operators are likely to be confronted with large quantities of oil imports after the war. He said this situation is being magnified in importance because of the philosophy of many government leaders that the United States should make available its markets to other nations.

Brown asserted that the pending Federal Power Commission investigation of the natural gas industry for the purpose of recommending legislation to control the production of gas was "just another backdoor approach to the control of the oil industry." If this federal agency, he continued "can control the production of gas it thereby has control and regulation over production of oil because there isn't a barrel of oil produced in which there isn't some gas in solution." Brown warned that there are many in high government authority who wish to renew the fight for federal government retention of mineral rights when surplus properties are disposed of, and that the industry's depletion allowance no doubt would face opposition in the next tax measure. He urged that some of these efforts of the federal government against the industry would be put over unless the independents kept eternally alert to the dangers that are threatening them.

Mississippi and Alabama Oil Men Plan Organization

With the rapidly increasing importance of Mississippi and Alabama as producing territory has come the desire among operators in that area for a local organization to protect the oil and gas development operations.

A meeting was held last week in Jackson, Mississippi, sponsored by a committee composed of independent oil men, representatives of other companies, attorneys, bankers and others to give operators a chance to express their wishes and to outline an organization.

The tentative plan was to organize a local association, specializing in the problems of the immediate area with headquarters in Jackson. As soon as possible, the group would affiliate with the Mid-Continent Oil & Gas Association as a local Mississippi-Alabama division.

During the past few weeks, discussions among operators in the two-state area indicate such an organization, functioning locally, might meet the needs of oil men in the cooperative handling of the many problems resulting from broad expansion of oil operations in these states, particularly during the critical period when the states are formulating their legislative and regulatory policies.

New World's Record Depth Set in California

Standard Oil Company of California set a new world's record for depth last week when its KCL 20-13 in the west edge of South Coles Levee field, Kern County, reached 15,368 feet and was "drilling ahead." Previously the record was held by Phillips Petroleum Company's Ada Price 1 in Pecos County, Texas at a mark of 15,279 feet. This was set last spring. Previous to the Phillips record, the deepest well, also in Kern County, California, was Continental Oil Company's KCL 2 in the Wasco area. Full story of the new record depth appears on page 73 of this issue.

Shown above inspecting operations at Standard of California's deep hole are, left to right, Al Tietze, general superintendent, northern district, producing department; C. L. Brewster, superintendent of drilling, and W. M. Quinn, drilling foreman.

Heads Ashland Firm

J. Howard Marshall, formerly with Standard Oil Company of California, is assuming presidency of the Ashland Oil and Refining Company, Ashland, Kentucky, succeeding Paul G. Blazer. Marshall has been chief counsel for PAW and assistant deputy petroleum administrator since 1941. James L. Martin, present chairman of Ashland, will become vice chairman.

Bedford Promoted

Standard Oil Company of New Jersey announces that A. Clarke Bedford has been elected executive vice presidnt. He has been general sales manager of the company and its affiliate since January 1, 1943, and has been active in sales work since 1920. Before joining the Standard company, he was associated with various other oil companies in executive capacities.

Ban Expected November 1 On Butane for Drilling

Faced with a shortage of butane because of rubber, aviation gasoline and seasonal heating needs, PAW is preparing to issue an order prohibiting its use in drilling operations begun after November 1 in areas where natural gas is available.

Considerable number of rigs are said to be operating on butane which can be shifted over to natural gas, thus conserving the limited supply of the former for other essential uses.

It will be emphasized, however, that the desire to save butane is not to be permitted to interfere with the drilling program, and that it may be used where natural gas is not available.

Lease Auction Set

A public auction of Osage Indian oil leases will be held November 16, at 1:30 p.m., at the Osage Auditorium in Pawhuska, Oklahoma. A total of 118 tracts comprising 18,617 acres on the east and west sides of Osage County will be offered.

East Texas API

The first fall meeting of the East Texas Chapter of the American Petroleum Institute has been set for October 25, at Kilgore, Texas. Glenn H. McCarthy, of Houston, will be the principal speaker. His topic will be the "Anglo-American Petroleum Agreement."

Revision of Oil Agreement May Drop Sections Objected to by Industry

Revision of the Anglo-American petroleum agreement may be undertaken by the State Department before the end of this year to remove all doubts as to the non-regulatory character of the compact. Maintaining their position that the treaty is not designed to put the government into any international cartel or to impose any federal regulation upon the industry, State Department officials are represented as prepared to make such changes in the document as may be necessary to make that point clear and unmistakable.

It is not expected, however, that any definite action to this end will be taken until after the Senate foreign relations committee has held hearings on the agreement, possibly late next month, and has indicated its views on the provisions which have been major targets of criticism.

Officials contend that critics of the agreement have read into its provisions desires which do not exist on the part of those concerned with its negotiation, but are understood to recognize that the industry's fear is very real and are willing to do what is necessary to allay it.

To a considerable extent, the Department is depending upon the Senate hearing to develop the points on which the compact is ambiguous, and so is doing nothing more at the moment than to attempt a rough outline of the changes which may be required.

Changes Asked

The major charges which have been leveled against the treaty are that it would put the United States government in an international oil cartel and give it authority to fix production quotas for domestic producers, enter into agreements for the allocation of world markets, set prices for crude and products and, in general, put the industry under strict federal control. Most of these things would be accomplished by the International Commission which would be created under the agreement to study world supply and demand and other questions.

For its part in the Department has consistently maintained that the Commission would have no power whatever to force acceptance of its recommendations, nor would the government have the power to require the industry to conform to such of the Commission's recommendations as it might approve. The Commission's authority would be limited to making recommendations, and the only way the government could enforce their adoption would be by specific action, most often in the form of legislation by Congress.

All of these points, however might be clarified by a revision of the agreement it is pointed out, and if developed by the Senate committee the Department will prepare to take them up with the British government representatives with a view to doing so.

In view of the uncertainty now surrounding the agreement, no negotiations will be undertaken with other countries pending a settlement of the controversey. The bi-lateral agreement with the United Kingdom contains a provision that it shall become a multi-lateral arrangement as other countries interested in oil accept its principles. In support of the Department's position, it is pointed out that it was promised in advance of the negotiations that the industry and the country would be given an opportunity to see the consummated agreement before it was put into effect and that that promise was kept by publication of the full document on the day it was signed.

Hardship Class Subsidy Details Are About Ready

Plans of the OPA for providing subsidy payments for high-cost operators are expected to be announced within a week. The program has been drawn up and Defense Supplies Corporation has been consulted regarding payment of the premium which is to be granted in the so-called hardship cases where cost of production is unduly high.

The subsidy will not be based on the volume of production, as is the stripper-well premium, but on figures of direct costs of lifting the oil, to which will be added a certain amount to cover depletion and depreciation.

So far only about a dozen applications have been filed by the "hardship class," although more are expected once the details of the plan have been announced.

PAW Pipe Line Expected Program To be Completed by End of Year

PAW's 12,000-mile pipe line program will be almost entirely completed by the end of the year, it was indicated last week.

The 232-mile 12-inch crude line between Elk Basin and Casper, Wyoming, by Stanolind Pipe Line Company is completed except for some gaps at river crossings, and the section between Kirby Station and Casper is ready for service, all of the block valves having been installed. Work is now going on in taking up the old line between Welch and Teapot Junction which is to be relayed for a 31-mile 12-inch line between Casper and Welch; 28,000 feet of the new right-of-way has been cleared and 3724 feet of pipe from warehouse stock strung. Completion of the line is scheduled by December.

All of the pipe for the Ohio Oil Company's 115-mile 8-inch products line between Robinson, Illinois, and Indianapolis, has been received and 44 miles strung. To October 14, 50 miles of right-of-way had been cleared, 34 miles of trench dug, 30 miles of pipe welded and 25 miles laid, about 21 miles of trench having been backfilled. Three amendments have been filed covering additional materials costing $284,900, which will increase the cost of the project, expected to be completed next month, to $1,547,150.

Construction work on the Colonial Beacon Oil Company's 35-mile four and six-inch products line between Everett and Methuen, Massachusetts, has been started. Ten percent of railroad and highway crossings have been completed and all the 4-inch and part of the 6-inch pipe have been received. The line is expected to be completed in November.

Construction of the Utah Oil Refining Company's 112-mile 6-inch crude line from Miles Dome pool, near Craig, Colorado, to Wamsutter, Wyoming, is about 74 percent completed, with 83 miles of pipe laid, and the project is expected to be finished next month.

On the program for pipe line outlets for Elk Hills crude to the Los Angeles refineries, PAW reported that General Petroleum Corporation of California has completed the 3-mile 6-inch line from Buena Vista tank farm on its existing line to Los Angeles. The 4000 feet of 8-inch section line also is completed and pumps are 95 percent installed. One complete pumping unit has been installed at each of the three stations located at Emidio, Rose and Grapevine. All pipe for the 20,000 feet of line along the Santa Fe Railroad to replace the 8-inch line now leased to and in use by the Rubber Reserve Corporation has been strung, and 12,500 feet welded and laid. Pipe for the 14,000-foot 8-inch line from Main Street to the Torrance refinery has been received but not laid.

Union Oil Company of California has dug about 12,000 feet of ditch for the 9-mile 8-inch line from Elk Hills to Midway Station and 3000 feet of salvaged pipe laid and tested. Work at Elk Hills station is well advanced, with all boilers set, except one stack. Suction lines to Standard's tanks are completed, and water, gas, exhaust and steam lines laid and power line erected. Work is expected to be finished this month.

The Texas Company has completed its survey and acquired 95 percent of the right-of-way for the 61-mile 10-inch line from Elk Hills to Cottonwood Pass. About 10 percent of the right-of-way has been cleared, and construction of pump stations started. The first tank has been dismantled and sites for the erection of tanks have been selected. The line should be completed in December.

Reports to PAW for the week ended October 14 showed that the Big-Inch moved an average of 323,273 barrels daily from Longview to Norris City and 312,769 barrels daily from Norris City to Philadelphia and New York. Little Big-Inch pumped 180,282 barrels daily of products from Beaumont and 181,634 barrels from Norris City, and Southwest Emergency line pumped an average of 75,114 barrels daily of crude from Heard Station.

Sinclair Aide Named

Sinclair Oil Corporation, New York, announces that Ernest L. Hughes has been appointed special assistant to Harry F. Sinclair, president. Hughes had been director of marketing at Chicago for PAW.

PAW Certifications Show Gain Over October but Are Below September Rate

A daily production of 5,023,900 barrels of all petroleum liquids was certified to the states for November by PAW October 19, an increase of 13,100 barrels over the current certifications but still 27,400 barrels under the all-time peak of 5,051,300 barrels authorized for September.

The daily production will include 4,720,500 barrels of crude oil, an increase of 12,000 barrels over October, and 303,400 barrels of natural gasoline and condensate, an increase of 1,100 barrels.

The net increase in crude production will come from higher allocations given seven states, offsetting decreases in three others. Ten states remain unchanged.

In District 1, New York production is left unchanged at 13,500 barrels daily and West Virginia at 8,500 barrels, while Pennsylvania will be cut back from 41,500 to 41,000 barrels.

Three of the District 2 states get increases, Kentucky from 25,000 to 26,000 barrels; Michigan from 50,000 to 50,500 barrels and Oklahoma from 340,000 to 345,000 barrels; two are cut back, Illinois from 205,000 to 200,000 barrels and Indiana from 13,500 to 13,000 barrels, and the remainder hold their current rates, Kansas at 274,000 barrels, Nebraska, 1,000 barrels and Ohio, 9,000 barrels.

The only change in District 3, is an increase for Mississippi from 46,000 to 50,000 barrels, with Arkansas unchanged at 78,000 barrels, Louisiana at 350,000 barrels, New Mexico at 110,000 barrels and Texas at 2,133,000 barrels

All three District 4 states are given increases, Colorado from 8,500 to 9,000 barrels, Montana from 22,000 to 24,000 barrels and Wyoming from 95,000 to 100,000 barrels.

District 5 (California) is left unchanged at 885,000 barrels.

There were nine shifts in the estimates for natural gasoline and cendensate, eight of them upward, with the remaining six states unchanged, as follows:

Pennesylvania, 1,300 barrels against 1,200 barrels for October; West Virginia, 6,400 barrels against 6,100 barrels; Illinois, 12,200 barrels against 12,100 barrels; Kansas, 6,000 barrels, unchanged; Kentucky, 2,800 barrels, unchanged; Michigan, 500 barrels, unchanged; Ohio, 500 barrels against 400 barrels; Oklahoma, 26,900 barrels against 26,800 barrels; Arkansas, 5,100 barrels against 5,000 barrels; Louisiana, 35,000 barrels, unchanged; New Mexico, 5,500 barrels, unchanged; Texas, 145,000 barrels, unchanged; Montana, 400 barrels against 300 barrels; Wyoming, 3,400 barrels against 3,300 barrels; California, 52,400 barrels, unchanged.

Texas Production Reviewed In Light of PAW Figures

A decline of 28,655 barrels in the demand for West Texas oil during November was filed at the statewide proration hearing before the Texas Railroad Commission last week.

PAW recommended that Texas produce 2,278,000 barrels of oil, including 2,133,000 barrels of crude, in November. However, the administrator requested that West Texas be allowed to produce only 462,000 barrels, 22,000 less than it produced in October, and that this difference be produced from sweet crude fields to be handled through the Big-Inch pipe line. Observers believed that this meant an additional day of production for the East Texas field.

H. P. Nichols, representing East Texas Oil Association, urged that the field be cut to 20 days from 23 producing days in October. He wanted more oil produced from West Texas to make up the difference.

The Commission asked Gulf Coast producers to state their stock situations and several major company representatives said they were very short on sweet crude or that they had sold any excess. Commissioner Ernest Thompson pointed out that the Bureau of Mines had reported an increase of 450,000 barrels in Gulf Coast crude storage during the week ending October 7. None of the majors, however, had it on hand.

The average pressure in East Texas dropped 6.27 pounds in September and higher production would probably mean a further decline.

Operators filed nominations to purchase a total of 2,313,796 barrels in November, which was 22,326 barrels less than the October nominations. There was an increase of 9000 barrels in Southwest Texas nominations; North Texas was up 2500 barrels and East Central Texas up 1500 barrels. However, there was a decline in West Central Texas and in East Texas nominations, each proximating 1000 barrels.

The Commission ordered wells used for tests which are equipped with pumping units may be shut in and their allowables transferred to other wells on the same lease. This was done to permit continued use of particular wells in order that the pressure picture might not be altered because the key wells used were changed.

Another order entered by the Commission provides for a volumetric displacement factor to be applied throughout the state to gas wells which are in oil fields. The new rule would apply wherever there are no special operating rules. It would limit the reservoir space voided by gas wells to the amount voided by the oil well producing from this reservoir with the largest daily allowable

Frank Speller, Tyler petroleum engineer, called the Commission's attention to an article in THE OIL WEEKLY of October 16 which compared the gas law in Arkansas and Texas and showed the benefits resulting from the Arkansas statute. He urged the Commission and operators to study this article with the view of revising Texas statutes along similar lines.

After the hearing, operators heard the report of Glen H. McCarthy, chairman of the committee of oil men which is opposing the Anglo-American agreement. McCarthy told of petitions which have been signed and of the organization designed to cope with the problem.

Conference Is Scheduled On Secondary Recovery

The Pennsylvania State College, State College, Pennsylvania, will hold a conference on "Secondary Recovery" October 27-28 under the auspices of the Pennsylvania Grade Crude Oil Association.

Dr. S. T. Yuster, in charge of secondary recovery research at the School of Mineral Industries, will discuss "Theories of Secondary Recovery." Other speakers and their subjects will be: J. C. Calhoun, "The Effect of Fluid Saturations and Pressure Gradients on Water Flooding"; R. J. Pfister, "A New Method for Determining the Water Input Profile of a Well," and R. L. McCormick, "The Behavior of Water Input Wells."

PAW Revokes Rules

Paw last week revoked directive 66, specifying the types of asphalt that may be manufactured, explaining that the supply of asphalt now is sufficient to meet all demands and transportation and storage facilities are adequate.

The agency also revoked recommendations 37 and 39, the former prohibiting any commitments for future oil deliveries and the latter requiring fuel oil consumers in Washington and Oregon not to exceed certain maximum temperatures in their establishments.

Tom Beach Sought

THE OIL WEEKLY has been asked to help in locating the father of Private Leonard Beavers, formerly of Kansas City, but now in a South Pacific hospital. The father, Tom Beach, was last heard from in the Oklahoma City oil field in 1936. Information should be forwarded to Chaplain L. L. Bowles, 9th Station Hospital, APO 709, San Francisco.

Crude Oil Production in the United States

(Estimates compiled by The OIL WEEKLY. All figures indicate daily averages, in barrels.)

STATE OR DISTRICT	PRODUCTION IN WEEK ENDED October 21	October 14
Alabama	300	300
Arkansas	80,850	80,600
California	892,000	887,500
Colorado	9,250	9,050
Florida	50	50
Illinois	190,700	204,700
Indiana	12,500	13,200
Kansas	295,650	267,900
Kentucky	24,750	24,650
Louisiana	363,200	363,800
North Louisiana	73,450	74,050
South Louisiana	289,750	289,750
Michigan	52,200	51,900
Mississippi	52,700	45,800
Missouri	100	100
Montana	22,670	20,970
Nebraska	900	900
New Mexico	103,550	103,550
New York	14,050	14,300
Ohio	7,550	7,750
Oklahoma	343,350	345,200
Pennsylvania	38,200	38,900
Tennessee	30	35
Texas	2,133,350	2,133,350
Upper Gulf Coast	537,700	537,700
East Texas Field	371,350	371,350
Rest of Eastern Texas	149,500	149,500
Lower Gulf Coast	236,850	236,850
Southwest Texas	77,800	77,800
South Central Texas	19,750	19,750
West Texas	492,800	492,800
North Texas	148,800	148,800
Panhandle	98,800	98,800
West Virginia	8,500	8,700
Wyoming	98,850	96,900
Total United States	4,745,250	4,720,105

Pony Edition Makes Hit With Men in Service Anxious to Keep Up With Industry

Besides furnishing "a type of news that we never have access to in the combat zone" (Capt. A. C. Elliott, in Holland with an engineering unit, on leave from Shell Oil Company), the Pony Edition of THE OIL WEEKLY, designed for and sent free monthly to oil men serving in the armed forces, enables the fellow who intends returning to the oil industry, once his war hitch is over, "to keep up with things so we can pick up where we left off and be better prepared for the job." (Lt. William L. Quinn, New York APO, "formerly in sales organization of Standard.")

The third issue of the popular pony will be mailed out the first week in November and will contain in abbreviated form all October happenings in the industry as reported in the five October issues of THE OIL WEEKLY. Some 7000 men are now on the mailing list. That most of them are already looking forward to each month's issue is attested by the volume of letters being received by the publishers.

From Burma, Capt. Hugh Adams writes "how you got my name and address is a mystery to me, but nevertheless I appreciate the thought. I have been a subscriber for a good many years and the little Pony Edition put me right back home and the oil game for awhile. There are oil wells not many miles from here and when we take them, rest assured I'll smear a little crude on myself just for oldtimes sake. Thanks again and as we say on the drilling rig "Keep a strain on her."

J. C. Wilkinson, ART 1/c New York fleet postoffice, says the Pony is "exactly what I have been wanting and needing."

S. P. Tschappat, president of the Hercules Tool Company, Tulsa, in requesting that the Pony be sent Major Kyle K. Siehr, San Francisco APO, comments "this is a mighty fine contribution to the men in the armed services overseas."

From The Aleutians

"The Pony Edition contained the first oil news that I've read in more than a year," Sergeant Willie I. Wilson writes. "I am stationed in the Aleutians where ANY news is good news."

Wesley A. Reed, CBM, San Francisco fleet postoffice, says "the Pony Edition was very interesting, especially the drilling news, as I was a rotary driller before entering the service, working in Texas, Kansas and Oklahoma."

Sgt. William D. Bryce, Jr., with a San Francisco APO, writes "to this time I have not received any magazine that has given me such a complete picture of what has and is taking place in the oil industry."

"For almost 2½ years I have had second-hand accounts and scuttlebutt about the oil industry and that dilemma has now been solved by your Pony Edition for those of us who are in foreign waters," Lieut. Sherman A. Wengerd, USN, APO San Francisco, formerly with Shell Oil Company, writes. "Scotch and soda to the man who devised and issued it."

From Iran, Lieut. Col. E. B. Tilley, for 20 years assistant superintendent transportation department, Gulf Oil Company, Houston, writes congratulations on "this splendid gesture to oil men in the service" and assuring that future editions will be especially welcome.

Capt. James A. Webb, formerly superintendent of Lucey Petroleum Company, Dallas, has spent the last 23 months overseas building military pipe lines. He had not received his first copy of the Pony but said "it is really something to look forward to. The news of the industry is one thing we really miss over here. When one gets a letter with news of some wildcat, extension, etc. it goes the round of those of us who can get together."

Lieut. T. V. Nielsen, Jr., with a New York APO, writes in his thanks for the Pony Edition. "I had almost forgotten that there was such an industry, much less a magazine that gives all the news of it, and I assure you that I will read it from start to finish."

Lieut. J. B. Cobb, Jr., New York fleet postoffice, had been "unable to keep up with events in the oil business, yet know that I must if I am to return to it. Your Pony Edition is the answer to a question which has worried me considerably. Please accept my sincere thanks."

Maj. Sam Rhoades, New York APO, has been with overseas pipe line units for two years and "knows it takes a hell of a lot of high-octane to support our forces . . . oil is our greatest single weapon—keep it coming to us." He writes "the Pony is exactly what we overseas men need to keep in touch with oil developments at home."

And thus they go.

Overseas men are not the only ones who have praised the Pony edition. Many men, high in the industry at home, have seen copies of the condensed issue and have taken time to send their congratulations to the publishers of THE OIL WEEKLY.

OPA Drafting Schedule of Prices for Texas Oil

The Office of Price Administration is working out plans for adoption of a dollar-and-cents schedule of maximum prices for Texas oil down to 21 degrees, similar to the schedules recently announced for Kansas and Oklahoma crudes.

OPA currently is engaged in an effort to translate all ceiling prices into dollar-and-cents maximums to eliminate inequalities which arose under the "freeze" by which the prices of many commodities were put under control in 1942 and 1943.

Oil Company Formed

C. U. Fitting, Jr., Midland, Texas, consulting petroleum engineer, and Curtis Norman, Brady, Texas, operator, have organized the Norfitt Petroleum Corporation to acquire and operate Hal C. Peck and Hall's 160-acre lease with 3 pumpers in the World-Powell field, Crockett County.

Gasoline Rations May Rise And Fall with Army Demand

A more flexible gasoline rationing policy, in which allotments to individuals might rise and fall with the tide of military requirements, may be adopted after the end of the war in Europe, when military demand may drop for a time only to rise again when the air and naval strength of the United Nations is concentrated against Japan.

Warnings that the defeat of Germany will not so reduce requirements for aviation gasoline as to produce unlimited gasoline for civilians were renewed last week by Deputy Administrator Davies.

As any substantial reduction in military demand does occur, civilian restrictions will be eased to the fullest extent physically possible in keeping with the PAW policy of supplying motorists all that is available after satisfying in full the needs of the military and of essential industrial and civilian activities, Davies said.

In other quarters, it was pointed out that diminution in military demand after V-E Day would result in the accumulation of products which would have to move into consumption if stocks were not to back up on the refineries possibly to the extent of necessitating curtailment of operations. The mere knowledge that these supplies exist, it was said, will precipitate an undeniable demand on the part of the public that it be permitted larger rations, a demand which undoubtedly would have strong support in Congress.

The suggestion for a flexible rationing is based on the theory that when larger gasoline supplies become available individual rations can be increased and that, if later military demand necessitates, they can be cut back as far as required to insure the Army and Navy all the products they require.

API Directors to Meet In Washington December 7

The board of directors of the American Petroleum Institute will meet at 10 a.m. December 7 at the Statler Hotel, Washington, D. C., President W. R. Boyd, Jr., has announced.

Setting a date for the deferred silver jubilee meeting of the Institute in the spring of 1945 will be discussed and major problems of the industry and the relationship of the Institute to those problems will receive consideration, Boyd said. An all-day meeting of the board is contemplated, with a meeting of the executive committee in the evening.

The Pearl Harbor Day meeting of the board will follow a session of the Petroleum Industry War Council December 6.

Skelly Reelected

William G. Skelly, founder of the Skelly Oil Company, was reelected company president at the 25th annual meeting of the organization October 18 at Tulsa. Skelly has served in this capacity since the company was first organized. Other officers reelected were: Hugh M. Stalcup, Arch H. Hyden, Jesse Knowles and James W. Vaiden, vice presidents, and F. T. Hopp, secretary-treasurer. All company directors were reelected.

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The Average Car Uses in...

18 YEARS!

The training of ONE pilot represents an investment of as much gasoline as the average car uses in 18 years . . . . The fuel tanks of ONE B-29 hold 8,000 gallons of gasoline—the approximate equivalent of the capacity of an average tank car . . . In ONE four-hour mission, 1000 Flying Fortresses will consume 400,000 gallons of gasoline.

Do you wonder why military needs of gasoline have jumped from 6.7% of total consumption in 1941 to an estimated 40% of the total today? Do you wonder why honest enforcement of rationing restrictions is necessary to forestall much more drastic regulations? And do you blame us for being proud of the privilege of having supplied the pumps that move the fuel of war through portable pipe lines to fighting fronts throughout the world? . . . Gaso Pump & Burner Mfg. Co., 902 East First Street, Tulsa, Oklahoma. Export Office: 149 Broadway, New York. Shreveport: W. L. Somner Co., 419 Lake Street. Los Angeles: Service Oil Field Supply Co., 5333 S. Riverside Drive.

GASO

FOR EVERY OIL INDUSTRY NEED

Pumps fuel to fighting fronts!

THE BLACK MARKET IS A PLAGUE that drains 2,500,000 gallons of gasoline a day from legitimate channels. It thrives on customers willing to sacrifice the nation's welfare to their own selfish convenience. Without such customers it would die overnight.

Oil Companies' Publications See Themselves as Others See Them in Surveys of Reader Opinion

Polls are accurate and time-tested method of gauging worth of periodicals serving both firm and employe

By A. R. McTEE, Staff Writer

WHAT do oil company employes want to know about their companies? What should they know? How are they to be told?

These perplexing questions face the management of every organization in the industry, large or small. The larger the company, the more difficult the questions become, but the greater the necessity for answering them. By their very size, large companies often appear more cold and formal, even impersonal in their attitude toward their personnel than smaller concerns; hence some effective means of overcoming this barrier, be it real or imaginary, is a very vital asset in building good fellowship and friendly, healthy relations within the larger company.

Most large companies seek to contact their personnel through some kind of a house organ, usually a periodical. By the printed word they aim to accomplish what it is impossible to do through personal contact: establish a common faith between employe and management and promote the principle that their interests are mutual and inseparable. Thus the medium becomes the mouthpiece of management, reflecting company policies and personalities. It also has to portray employe interest and attitude. A happy blending of the two purposes well presented should give the ideal instrument, a publication typifying the true spirit of the organization.

Getting this ideal combination is easier said than done. More often than not the publication misses the mark, or at best only half hits it. The editor is constantly beset by fears that the job could be done better. If he becomes smug, as Philip Wallach, Acting Editor of *Shell News* says, "sits back and thinks to himself that things are going along smoothly, somebody comes along to destroy his illusions." If he decides his publication is tops, somebody else is likely to remark, "How do you know the magazine is all right, just because a few people write now and then; maybe others would like to criticize it but just don't bother. Then someone else is certain to say, 'Well, why not ask the readers what they think?'" This very thing has been done in a number of instances to try to get a true reflection of what readers want, and this is a summary of a few such surveys.

Boiled down, the surveys generally aim at getting answers to the questions posed at the beginning. Some of the surveys were made recently; others are several years old. All were conducted according to the best known rules of taking public polls.

Shell Oil Company has just completed a study of reader opinion by *Shell News* readers, which covered 18,000 contacts. Of the 18,000 questionnaires sent out, 4000 came back. Ten questions were asked. These with the answers from Shell readers are given below:

Question 1. Should we use semi-technical stories on Shell operations and products?

Yes	3038
No	287
No Answer	47

Question 2. Should we use stories of general interest having no relation to the company's activities or personnel?

Yes	2308
No	987
No Answer	77

Question 3. Do you prefer articles to be 2, 5, 4 pages, or depending on the article?

Depends	2875
2 pages	590
4 pages	110
5 pages	45

Several persons marked more than one length.

Question 4. Photographs: Do you believe Shell News illustrates its stories with about the right number of photos, not enough, or too many?

About right	2389
Not enough	689
Too many	40
No answer	254

Question 5. Check any of the following features which you think might add to your interest in Shell News.

More intimate news	2491
Humor	1413
Editorials	1362
Hobby stories	1294
Woman's page	439

Question 6. Do you read Shell News thoroughly, most parts, casually, or not at all?

Thoroughly	1591
Most parts	1559
Casually	217
Not at all	8

Question 7. Does your family read Shell

1. Should we use semi-technical stories on Shell operations and products?
   ✓ Yes No

2. Should we use stories of general interest on subjects having no relation to the Company's activities or personnel? (For instance, "Australia," "Army Hospitals," and "Postwar World," which were in past issues.)
   ✓ Yes No

3. Do you prefer articles to be
   2 Pages? 5 Pages? 4 Pages ✓ Depends on article.

4. Photographs: Do you believe SHELL NEWS illustrates its stories with
   ✓ About the right number of photos? Not enough? Too many?

5. Check any of the following features which you think might add to your interest in SHELL NEWS:
   Woman's Page ✓ More intimate news of those in other Shell locations
   Humor Editorials Hobby Stories

6. Do you read SHELL NEWS
   ✓ Thoroughly? Most parts? Casually? Not at all?

7. Does your family read SHELL NEWS
   ✓ Regularly? Occasionally? Not at all?

8. Are you interested in reading about Shell
   ✓ Men on Military Leave? ✓ Employees? Personnel Policies?
   ✓ Products in War Use? Management? Organization?

9. Which of these sections do you read regularly? Please number them in order of preference.
   4 After Hours 5 Organization Charts 2 With the Colors 7 War Bond Chart
   3 Service Birthdays 1 People in the News 6 Matters of Fact None

10. You have recently received a booklet, "Fighting Fuels"; from time to time the Company has mailed similar booklets to you. Do you read them
    ✓ Always? Occasionally? Never?

15

Sample of questionnaire returned to Shell Oil Company

CAMERON FLOW WINGS

Lower First Cost

Lower Maintenance

KEEP ON BUYING BONDS!

Here is a proven Xmas tree accessory which combines all necessary wing fittings in a single compact unit, including an efficient valve which obviates the need for conventional wing valves, and thus substantially reduces the cost of the Xmas tree. The simplicity of the unit permits replacement of any of its parts in the field, and the ease with which chokes may be changed contributes further to its low maintenance.

Briefly, the Cameron Flow Wing consists of: (1) An easily operated valve section which provides a pressure-tight shut-off for choke changing; (2) A quick change choke, either positive or adjustable; (3) An efficient 2-bolt union which obviates the need for an additional union in the flowline; (4) A bleeder plug to release pressure trapped in the flowline.

Changing chokes in the Cameron Flow Wing is such a simple operation that it requires only a fraction of the time required by conventional chokes which employ cage nipples or other enclosures for the flow bean. The choke section of the Cameron Flow Wing is out in the open and is replaced by simply making two turns on a clamp screw to release the flow bean, inserting a new bean and tightening the clamp screw.

Cameron Flow Wings are offered in several screwed and flanged styles, ranging up to 10,000 lb. test. Like any standard fitting or valve, they may be incorporated in any manufacturer's Xmas tree.

CAMERON IRON WORKS, INC.

711 MILBY ST., HOUSTON, TEXAS

Export: 74 Trinity Place, New York, N. Y. California: Howard Supply Co., Los Angeles.
Rocky Mountain: Mountain Sales & Service, Casper, Wyo.

The LAMP is twenty years old. Starting as a conventional "house organ", the scope of its contents has expanded to include a wide range of topics related to the petroleum industry. The company has received a large number of unsolicited requests for the publication from many outside the business. It has built up a small paid circulation list among those not qualified as shareholders or employees.

But a magazine cannot stand still, any more than can the company itself. It must keep up with the times with new ideas in contents, typography and layout to meet changing trends in readers' tastes.

To this end we ask your help. Won't you take a few minutes to jot down your answers to the questions below?

1. **Front Cover**—Do you favor the present type of cover (reproductions of oil paintings) on the LAMP?_____
   Or should we use special drawings as formerly, color photographs or some other kind?_____
   Do you frame front covers of the LAMP?_____
   And would you be willing to pay a nominal mailing charge for reproductions specially run off for framing purposes?_____
2. **Back Cover**—Since we carry no advertising, the back cover has always been a problem. Have you any suggestions for its better use? _____
3. **Editorials**—What topics do you like to see covered in LAMP editorials?_____
   Should we stick to subjects calling for an expression of opinion?_____
   Or should non-controversial editorials of an educational nature be included?_____
4. **Company Activities**—What phases of the company's business particularly appeal to you? _____
5. **Feature Articles**—What subjects outside of the company's own activities do you want the LAMP to cover?_____
6. **Foreign Articles**—There are two foreign stories in the current issue. Do you find them interesting?_____
   Or in what way might they have been improved?_____
7. **Over the President's Desk**—Does this feature interest you?_____
   What further information might be included?_____
8. **General Interest**—What features of the LAMP do you follow regularly?_____
   Do you pass the magazine along for others to read; if so, how many see it besides yourself?_____
9. **Length of Articles**—What is the maximum number of pages to an article (including illustrations) which you find yourself able to read with sustained interest?_____
10. Please check whether you are a man_____; or a woman_____
    If the latter, are there any features of particular interest to women which you feel might appropriately be included?_____
11. **General**—If there are any other suggestions you would care to make which would aid us in improving the magazine, we should appreciate them._____

Standard Oil Company (New Jersey) questionnaire concerning *The Lamp*

News regularly, occasionally, or not at all?

Regularly	1616
Occasionally	1281
Not at all	202
Don't know	20
No family	186
No answer	67

Question 8. Which of these subjects are you interested in reading about?

Men on military leave	2173
Products in war use	2165
Employes	2014
Management	1615
Personnel policies	1803
Organization	1507

Question 9. Which of these sections do you read regularly? Please number them in order of your preference.

People in the news	11,526
With the colors	9,919
Service birthdays	9,158
After hours	7,612
Matters of fact	6,619
Organization charts	6,376
War bond chart	5,707

(Totals of these answers are weighted between military and civilian personnel.)

Question 10. From time to time the company mails booklets, etc., —— —— ——

Always read	1512
Occasionally	499
Never	81
Didn't get any	201
No answer	88

A research expert recommended that the single, essential change, based on the survey "would be to devote more space to news of individuals at Shell's various areas, divisions, and refineries."

Rounded Interest

Returns from a similar survey conducted by the editor of *The Lamp*, monthly publication of Standard Oil Company (New Jersey) indicate an active interest in all phases of the magazine. The following is a brief summary of the returns:

Front Cover: 94 percent were in favor of continuing the present type of front cover, with color photographs a poor second, special drawings, third. It was pointed out that printing on the cover prohibits framing, but 69 percent said they do not frame the covers. Forty-six percent said they would be willing to pay a nominal cost for special covers suitable for framing.

Suggestions for use of *back cover:* Nearly every return contained suggestions. The following received the most votes:

List all company products, according to uses, seasons, etc.
Run statistical charts on various phases of the oil industry.
Run pictures of the company's fields, refineries, tankers, etc.
Run maps showing various fields of company activities.
Poems or sayings bearing a moral.
Previews of billboard ads.
Tax editorials.
Run own company advertisements.

Editorials received strong mention. Definite expressions of opinions in editorial form were favored by 56 percent of the readers. Uncontroversial, educational editorials were suggested by 43 percent. Again, many suggested topics for editorials with these getting the most votes:

Company problems and policies.
Economic trends in the oil industry.
General economic trends, domestic and foreign.
Taxation, especially as it affects the company.

On the question of *company activities*, most returns contained multiple answers:

32 percent were interested in production.
28 percent asked for information on development and research.
26 percent wanted information on transportation of petroleum.
28 percent were interested in sales.

Of the many topics suggested for *feature articles*, the following were most popular:

Stories on various industries using the company's products.
Historical stories of the "Where Tankers Drop the Hook" style.
Company foreign activities.
History of ships and commerce.
Aviation.
Diesel power.
All phases of transportation.
Sports.

Articles on *foreign countries* and subjects were found most interesting by 97 percent. There was an overwhelming demand for more of this type of article.

"Over the President's Desk," a feature which *The Lamp* then carried was voted most interesting by 87 percent. Readers suggested the use of more "knocks" and "complaints." Many wanted to read the president's reaction to these letters.

On the *length of article*, there was a divergence of opinion as follows:

17 percent favored 6 or more pages.
15 percent favored 3 pages.
14 percent favored 4 pages.
8 percent favored 5 pages.

Articles of general interest brought multiple answers, but *features regularly read* and looked forward to included:

52 percent followed articles on company activities.
41 percent followed special features.
41 percent followed editorials.
40 percent followed personal news.
39 percent looked for "Over the President's Desk."

To the question "Do you pass *The Lamp* on to others and to how many?", 84 percent answered "Yes," indicating a reader coverage by the magazine of about 300,000.

Of the questionnaires returned, 94 percent were from men. *Women* who answered *suggested* the following:

More travel articles.
Explain the home use of Esso products.
Familiarize Daggett and Ramsdell products.

This LANE-WELLS *Olympic* PACKER

Type BO-C

is built to withstand the strain of

- ***FAST ROUND TRIPS***
- ***DEEP WELLS***
- ***HEAVY MUD***
- ***HIGH FLUID COLUMNS***

LARGE BY-PASS AREA
—permits running at normal speeds in the heavy muds required for deep drilling.
MULTI-SET PACKING RINGS
—can be set and reset many times.
DOVE-TAILED, CROSS CUT SLIPS
—provide maximum contact area and prevent hanging up in windows or casing collar joints.
CAGE CONSTRUCTION
—permits easy operation and positive action of packer in the well.

EACH of the fifteen types of Lane-Wells Olympic and Quinta-Seal Packers is correctly designed and built for successful operations under difficult conditions. The Lane-Wells Olympic Type BO-C Circulation Packer is designed especially for fast round trips in deep wells having heavy mud or high fluid columns. The internal by-pass feature permits running this packer in and out of the hole in a minimum of time without swabbing action. Check the features of this Lane-Wells Packer against your own requirements.

Write For Bulletins

Two bulletins are available, giving complete descriptions and applications as well as engineering specifications of all Lane-Wells Packers. Write today for your copies.

Tomorrow's Tools -- Today!

LANE WELLS

LOS ANGELES • HOUSTON • OKLAHOMA CITY
General Offices, Export Office and Plant:
5610 So. Soto St., Los Angeles 11, California
24-HOUR SERVICE • 30 BRANCHES

ANALYSIS OF CONTENTS OF 325 EMPLOYE PUBLICATIONS

(Compiled by Metropolitan Life Insurance Company)

	No. of Publications Using
NEWS OF THE WAR	
Company's part in war effort	131
Drafter or enlisted employes	152
National defense and the war—General Information	145
Patriotic appeals	77
Prevention of sabotage	38
War savings plans	123
Efforts to Increase Efficiency	
Attendance	3
Improvement of service	9
Reduction of waste	57
Production campaigns	16
Suggestion system	73
Technical articles	45
Training program	57
Editorial	15
Messages from Executives	66
Official Announcements	
Aid-to-Britain plans	5
Bonus plan	9
Hours	19
Jobs available in the company	1
Job instructions	6
Lawsuit against the company	2
Plant rules	39
Policies covering employes in military service	57
Strike	4
Vacation plan	18
Wage plans	16
The Wagner Act	1
Report from the board of directors	1
GENERAL INFORMATION ABOUT THE COMPANY	
Age or length of service of employes	12
Appointment of new officers or directors	39
Availability of raw materials	15
Customers	12
Employment	5
Exports	1
History	38
Job or work of a specific department or plant described	83
Organization of the company	8
Plant expansion	65
Products and advertisements	86
Public relations	9
Purchases	1
Sales contest	23
Stockholders	9
Wage level and earnings	24
FINANCIAL INFORMATION ABOUT THE COMPANY	
Annual report to employes	70
Annual meeting of stockholders	7
Bond interest	1
Business conditions	39
Cost of equipment	2
Dividends	8
Financing	4
Forecast future business conditions	7
Investments	2
Prices	8
Sales	50
Taxes	31

	No. of Publications Using
INFORMATION ABOUT THE INDUSTRY	5
Company Services for Employes	
Credit unions	51
Employe Mutual benefit Assn. & Hosp. benefits	40
Employe magazine history	9
Employe stock ownership	1
Group insurance	30
Library	32
Pensions	13
Profit sharing	3
Transportation for employes	15
Other services	22
Group Activities of Employes	
Athletics	237
Clubs and recreation	177
Personals	291
Recognition of Employes	
Awards for distinguished service	4
Employes promoted	57
Heroism of employes	19
Letters to Company praising employes	24
New employes	22
Obituaries	85
Retired employes	66
Service anniversaries	97
Promotion of Health and Safety	
Health	59
Safety	168
Economic Information	73
News of Outside Happenings	
Alien registration	9
Community activities	70
Citizenship	3
Income tax (individual)	95
Social security	9
The war—General Information	19
Political News	
Proposed legislation	6
Other	12
Material for Wives and Children	
Children's page	11
Fashions and interior decoration	41
Recipes and household hints	44
Sons and daughters	167
Interest Builders	
Chess problems	1
Classified ads	30
Crossword puzzles	5
Fiction	21
General interest articles	74
Jokes	120
Poetry	27
Prize contests	10
Puzzle	5
Quiz contests	13
Question and answer quizzes	16
Reader's Forum	1
Miscellaneous	
Personal improvement articles	17
Religious material	10
Union news	3

Recipes.

Art of make-up.

From a questionnaire sent out to check with readers of *Socony-Vacuum News*, 1720 replies came back. All answers were anonymous. Interest of employes in company problems is indicated by the questions with answers given below:

Do we print too many articles about the management?

Yes	299
No	1303
No answer	118

In the June issue we printed an article about the company's activities in West Africa. Did you find it interesting?

Yes	1601
No	58
No answer	61

We have printed a number of articles on the subject, *Know Your Company*. Should we print more of these articles?

Yes	1601
No	58
No answer	61

Were you interested in the Socony-Vacuum *annual Report to Employes* as published in the June issue?

Yes	1531
No	75
No answer	114

Would you like more articles about the *company's sales, its problems, its taxes, its expenditures,* etc?

Yes	1461
No	130
No answer	106

Socony-Vacuum is not in politics and does not want to get into political arguments. Sometimes, however, *federal and state legislation* definitely affects the company's activities and hence your job. Do you think we ought to publish articles on subjects of this kind?

Yes	1484
No	130
No answer	106

Questions relating to *personal comments* did not receive heavy approval. For instance, to the query, "Would you like to have more personal comments with pictures of new babies, new brides, etc.," these answers came back:

Yes	295
No	1324
No answer	101

In the space for *general comments*, employes made requests for more information about the operations of the company in production, manufacture, and marketing. A number wanted to know more about the foreign service, wages, hours, and living conditions.

The Texaco Star has completed a survey recently, only of names on the "complimentary" list of subscribers. No specific questions were asked, but popularity of the publication is shown by the fact that 60 percent of those contacted asked that their names be continued on the list. Of 1055 cards mailed out, chiefly as a check on the accuracy of the mailing list, more than 800 reply cards were returned. Of those who asked that their names be kept on the mailing list, 90 percent took the trouble to comment. A large proportion was highly favorable. Some of the constructive criticism mentioned humor, post-war homes and sports. An "employes' voice" column was suggested by one reader. More technical articles were also suggested. Since *The Texaco Star* is slanted more toward the stockholder than toward employe, however, the suggestions, in the opinion of the editors, applied to other special publications of The Texas Company, such as *Texaco Topics* or *Lubrication*.

A smaller publication than those mentioned so far, *The Expanding Circle*, published by the Arkansas Natural Gas Corporation, reports that in a survey which it completed, "We set out to determine which features of the magazine appealed most to the readers. We found that the greatest reader interest was in the departmental news section of the magazine, and surprisingly, the second vote went to the editorial page."

Aside from the fact that the surveys show clearly that personal news is the most sought-after by employes in company publications, there is convincing evidence that there is an unsatisfied demand for practically any type story on company activities and policies. The opportunity for strengthening relations between the company and its employes are practically unlimited in the house organ. It will be recalled that one of the objectives recommended by the American Petroleum Institute at the last annual meeting for individual oil companies was the promotion of a better understanding between the public and the companies.

Editorials Popular

Editorial comment is also welcomed in company publications, as shown by the surveys. Perhaps officials and management of companies are overlooking important avenues by not using the editorial pages of their company magazines for more frequent contact with employes.

The surveys as a whole reveal a surprisingly avid interest in nearly all the features of those publications discussed. With such reader interest, the field of opportunity for the publications is very broad.

An interesting observation on two of the companies mentioned is that their publications have won top honors in a recent competition. In the contest sponsored by the National Council of Industrial Editors Association, which included 1100 entries, *The Lamp*, publication of Standard Oil Company (New Jersey) won first place in the class of internal magazines with color and cover, over 16 pages. *Texaco Topics*, published by The Texas Company, was awarded second place in the class of internal newspapers or bulletins with cover.

Baash-Ross News

BAASH-ROSS TOOL COMPANY · LOS ANGELES · HOUSTON · NEW YORK

OIL WEEKLY EDITION

A PRE-WAR ECONOMY FEATURE HAVING ADDED ADVANTAGES TODAY...

With ONE Set of BAASH-ROSS "DU" ROTARY SLIPS

you can drill from grass-roots to completion *by simply changing liners!*

No waiting for new slip bodies when pipe size is changed!

In designing the "DU" Slips, Baash-Ross engineers incorporated a unique performance feature that cut Rotary Slip costs to an absolute minimum...with *one* set of "DU" slip bodies a wide range of pipe sizes could be handled *simply by changing the liners.* Even in pre-war days this advantage was a vital one, for it meant that one set of slips could be used throughout the drilling and completion of an average well. It was only necessary to replace the inexpensive slip liners every time pipe size was changed instead of buying an entirely new set of slips, as is necessary with conventional units.

Today, this economy feature is paying *double* dividends to owners of "DU" Slips, for—besides cutting slip costs to the bone—it means that operators using "DU" Slips are not having to hold up their drilling programs when they change pipe sizes while they wait for delivery of hard-to-get slip bodies. They simply install a new set of liners in the "DU" body—a quick, easy operation—and are ready to go. It's not only far cheaper, but also eliminates delay and conserves metal!

Look at These "DU" Slip Advancements!

POSITIVE SLIP ALIGNMENT: All segments work together as a unit. Even though off-center pipe pulls on one segment, others also drop in perfect alignment. Safeguards pipe. Speeds roundtrips.

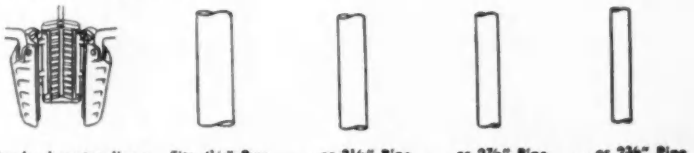
ADVANCED GRIP DESIGN: Small truncated pyramids minimize pipe penetration. Also, grip area is relieved vertically and horizontally to eliminate stress concentrations that cause pipe damage.

SAFETY LINER MOUNTING: Liners held by deep recesses in body to insure transmission of all stresses directly to slip body. No bolts or pins to sheer and drop liners in hole. Yet liners are easily replaced with minimum effort!

SAFETY HANDLES: Handles are unusually husky and have large loops that protect crew's hands from smashing against table should elevators strike handles. A vital safeguard!

UNIQUE FLEXIBLE HINGE: Maintains rigid vertical alignment, yet permits lateral adjustment for perfect fit in master bushing bore.

FOR EXAMPLE...



By simply changing liners this 4½" "DU" Slip Body — Fits 4½" Pipe — ...or 3½" Pipe (or tubing) — ...or 2⅞" Pipe (or tubing) — ...or 2⅜" Pipe (or tubing)

From Drill Pipe to Tubing with the same slip bodies!

And this is just one of several unique "DU" Slip advantages that are doubly valuable in meeting today's drilling problems. With today's manpower problems operators are finding that, even with green hands in the crew, they can run pipe faster with less damage when using "DU's" ***because these slips are completely unitized for a uniform setting every time.***

In contrast to conventional two- or three-man slips where one slip can be set lower than the rest to cause uneven gripping pressure and costly pipe damage, all three slip segments in the "DU" are unitized into *one* unit. All segments *automatically* set together and release together, maintaining exact vertical alignment at all times. This means that *any* crew—experienced or not—can set "DU" Slips perfectly every time, assuring faster round trips, a better grip on the pipe and minimum risk of damage. Still other "DU"-advantages are outlined at left.

Baash-Ross "DU" Slips are available in two types—"Regular" with liners 12" long for wells to 8000 ft. (sizes for all pipe diameters to 7") ... and "Long" with 16" liners for deeper wells (sizes for pipe diameters to 5-9/16"). *Also in special sizes to fit smaller tables of portable rigs.* Get the full story on these advanced slips from your nearest Baash-Ross distributor. Or write direct!

How to Increase Life of Machine Parts

PART 2

By E. N. KEMLER

Professor, Mechanical Engineering
Purdue University

THE previous article (THE OIL WEEKLY, October 9) discussed the mechanism of failures and pointed out how many machine elements failed by fatigue. Figure 1 shows a crankshaft which failed. In this case the failure was by fatigue. In fatigue, failure starts at some point and then progresses across the section. The marks on the two sections show the progress of the failure. Figure 2 shows sucker rod elevator bail which also failed by fatigue. These two failures were fatigue failures but were accelerated by stress concentration.

A machine part which has a variable section usually has stresses much higher than those which would be calculated by simple methods because of stress concentration. Stress concentration may be defined as the increase in stress because of a change in cross-section. In a shaft of uniform diameter subjected to a constant torque the stress along the shaft will be uniform. In one where the diameter varies the stress will be different in each section and where any change in section occurs it will be much higher than the value on either side of the section. The same general condition holds for a bar of variable section. Figure 3 shows a bar loaded in tension. At section A-A the stress will be the load divided by the area and will be uniform across the section. If the bar is divided into four parts as indicated by the dotted lines each of the four parts will carry one-fourth of the load. The same condition holds at section B-B and at C-C. The stress at C-C will however be much less because the area of the bar is increased. At the point where the section of the bar changes however the line representing equal load carrying capacity will crowd in, resulting in the section of the bar carrying one-fourth the load being much less than at A-A. The result is a large increase in stress. Figure 4 shows the stress across each of the sections of the bar. The ratio of this stress at any section divided by the normal or average stress that would be expected is called the stress concentration factor.

Stress Varies

Across sections A-A and C-C the stress is uniform. At section B-B however the stress is not uniform and the stress concentration is the raito of the maximum value to the average value. Since the load carried is always the same the area under the stress curve must be the same for A-A and B-B. Since the stress is higher at some points at section B-B, it must be lower at others. Theoretically the stress concentration at sharp corners is infinite. Practically the material yields a little and results in some lowering of the stress concentration.

The examples shown in Figures 1 and 2 were pointed out as fatigue failures that started as the result of stress concentration. Where a part is pressed on as in Figure 1 bending may cause the heavier section to press into the lighter member, thereby causing failure. When there is change in shape of a member such as the elevator bail shown in Figure 2 stress concentration will also result. Figure 5 shows a sucker rod wrench fatigue failure. Stress concentration can occur when a square section is attached to one of different shape.

Stress concentration occurs at any place where there is a change in section. Threaded parts are subjected to stress concentration because of the changes in section. When they are subjected to varying loads they frequently fail from fatigue because the stress at the root of the threads is raised above the average value because of the effect of the notch. When this stress exceeds the fatigue limit of the material failure will result. To increase the working strength of threaded joints subjected to fatigue loads round bottom threads are frequently used to reduce stress concentration or the diameter of the threaded section may be increased. In the care of sucker rod joints, the joint is made up very tight so that the variation of load within the joint is very low. Since fatigue depends on the amount of variation of the load as well as its magnitude additional working strength can be obtained by this means.

Figure 6 shows a photostatic test on a threaded joint. This particular study shows the load in a section through a sucker rod joint when under make-up conditions. The make-up causes the pin to be placed in tension. This load is transmitted from the pin to the coupling. The lines on this picture give some indication of stress condition at the boundary. The many lines converging at the thread root indicated by arrow A indicates a condition of high stress. It will be noted that further along the pin the stress condition is less severe. This high concentration of stress at the roots of the pin threads is the reason for sucker rod pin failures. As indicated above fatigue failure results from high stress and varying load

FIGURE 1
Crankshaft fatigue failure.

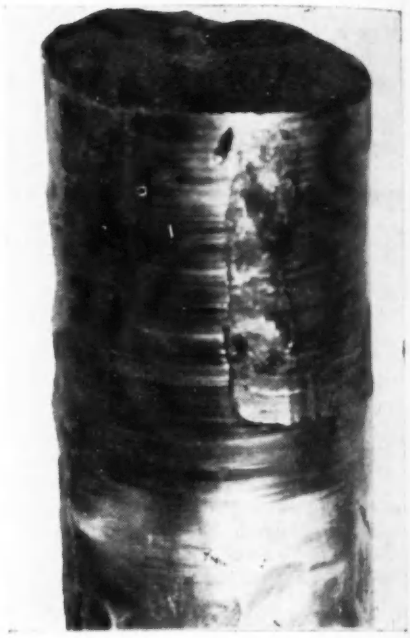


FIGURE 2
Fatigue failure of elevator bail.

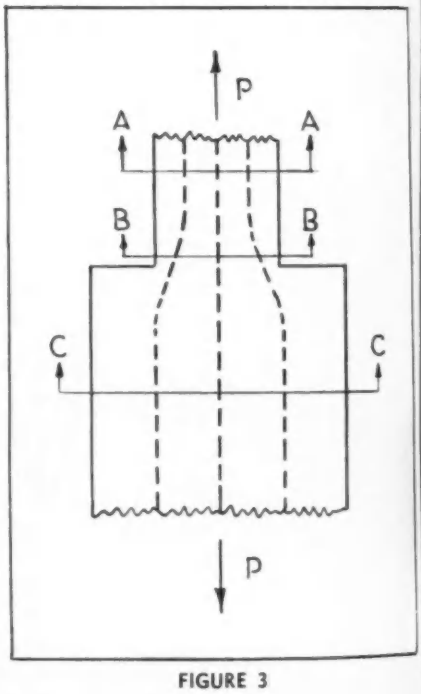


FIGURE 3

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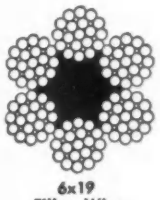
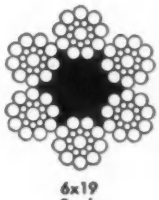
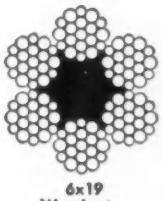
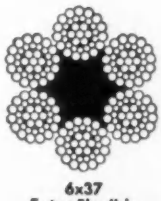
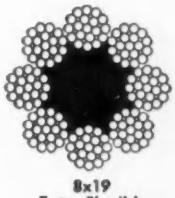
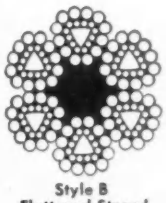

6x19
Filler Wire


6x19
Seale


6x19
Warrington


6x37
Extra Flexible


8x19
Extra Flexible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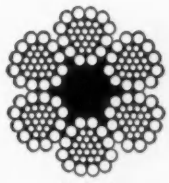
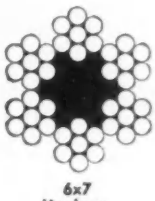
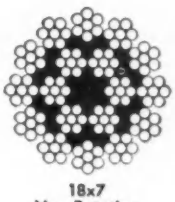
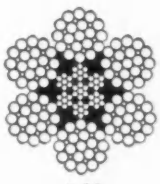
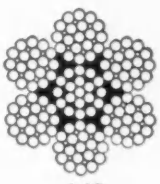
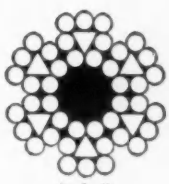

Style G
Flattened Strand


6x7
Haulage


18x7
Non-Rotating


6x19
Wire Rope Center


6x19
Metallic Core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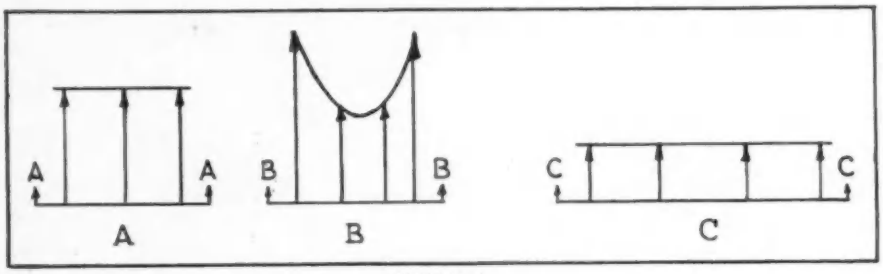

FIGURE 4

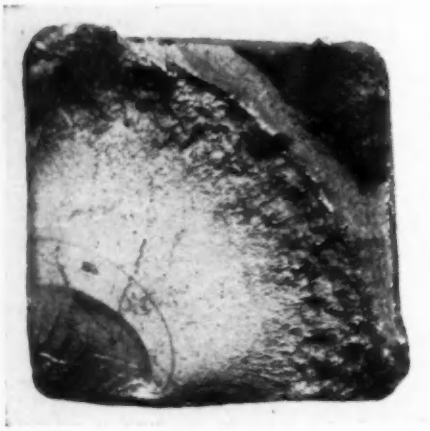

FIGURE 5
Sucker rod wrench square fatigue failure.

A reduction in the amount of variation by proper make-up saves many joint failures even though the stress is high. Figure 7 shows a sucker rod pin fatigue failure.

Corrosion pits and scratches also have the effect of being stress raisers. At the bottom of the pits or scratches there is a sharp change in section which will result in stress concentration. In highly stressed members the presence of scratches can result in fatigue failures. Shafts subjected to heavy loading should be carefully protected from scratches or nicks. Drill pipe is also subjected to stress concentration if improper slips or tongs are used. Any nicks or identations can result in stress concentration which in turn may cause failure due to fatigue. Mechanics

FIGURE 7
Sucker rod pin fatigue failure.

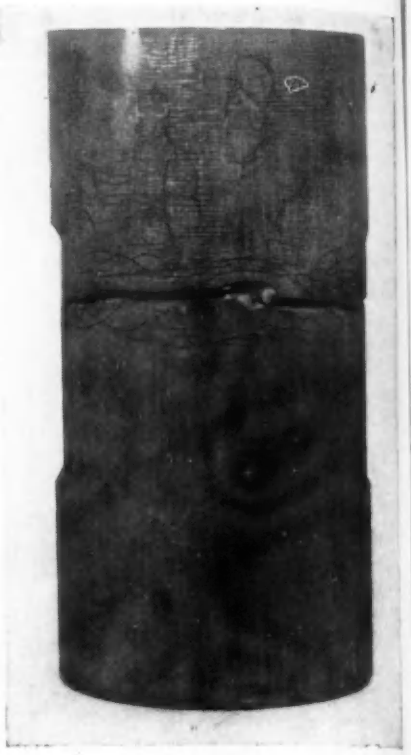

FIGURE 8
Fatigue failure—sucker rod coupling hammering.

Photos of Figures 2, 5 and 8 courtesy S. M. Jones Company.

are frequently careless in the removal of parts or in the handling of shafting so that it is damaged. Such nicks are often the start of fatigue failures since stress concentration occurs at them. Figure 8 shows a sucker rod coupling failure which occurred because of hammer blows on it. Heat treated parts are much more sensitive to mishandling than softer materials since the latter can yield and cause a redistribution of the stress. ■ TO BE CONTINUED

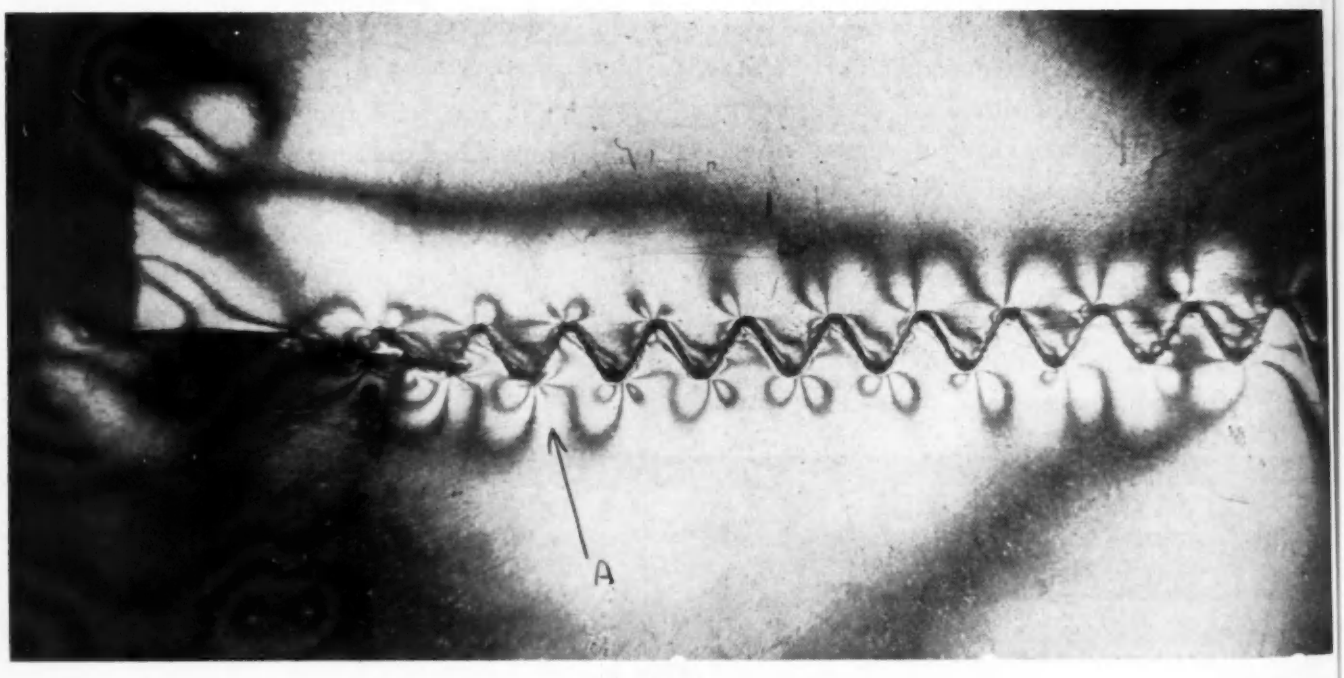

FIGURE 6
Showing photostatic test on a threaded joint.

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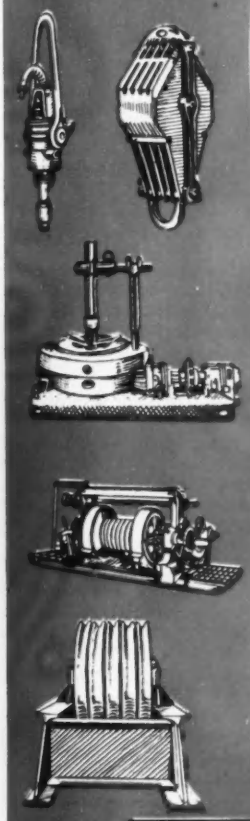

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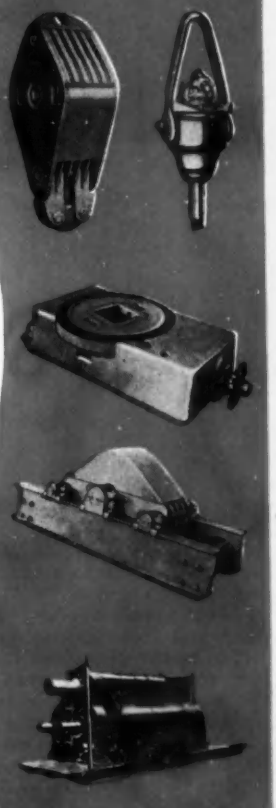

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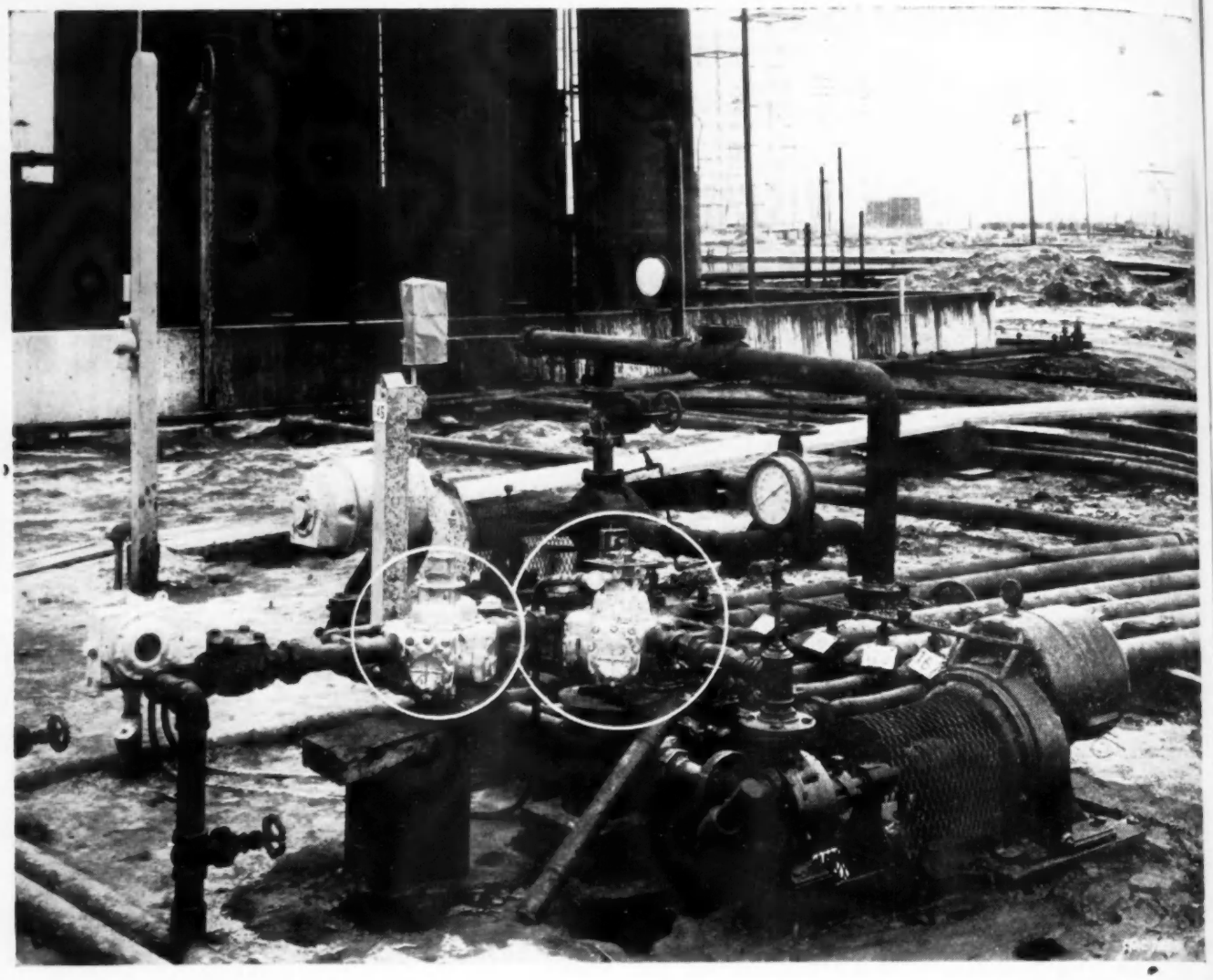

Measuring Plurality of Oil Wells With One Meter Helps to Maintain Records

METERING of oil wells has always presented a problem of providing equipment, but more so in the maintenance of continuous records from hour to hour and from day to day.

To meter the flow from each well, the required equipment usually calls for a separator, individual meter and a storage tank to receive the oil after it has been measured. Then the oil must be transferred to the shipping tanks where it is gauged for transmission from the field.

Engineers of a prominent West Coast oil producing company have developed an effective system of metering that dispenses with the use of duplicated equipment to a large extent and has eliminated thousands of man-hours annually. The system automatically separates, desands, meters and moves crude oil through the gathering system to the lease shipping tanks.

Production in this particular field comes from both flowing and pumping wells, the oil gravities from the several zones varying between 14 and 31 degrees API. There are 297 wells on the lease operated by this company and if all of the wells are eventually provided by the facilities of their metering methods, an estimated saving of between $400,000 to $500,000 will be effected in equipment, to say nothing about the labor saving.

One Meter Instead of Many

Instead of using a meter for each line from each well, one meter is hooked up in such a manner that it meters several wells and the individual output of each well is recorded automatically.

Most of the multiple installations meter 8 wells, and some, 4 wells, but provision can be made to meter 12 or 16 wells with only one meter. This depends upon the location of the wells and the feasibility of grouping pipe lines to a central location. Sometimes it is more economical to meter only 4 wells on one meter if the 4 are in close proximity and other wells are distant from them.

The system developed and patented by the operators is based on what is called the automatic oil meter sequence selector. It consists of a special panel board, electrically controlled. On the board are individual counters, one for each well. There can be as many counters as desired, but there are usually 8 counters for 8 wells. Each counter has a solenoid actuated by a micro switch from the selector.

On the panel board is the ingenious

At top of the page is pictured a meter hook-up for multi-well recording. The meter in circle at right measures the flow from six wells. The meter at left is temporarily installed to check the operating meter.

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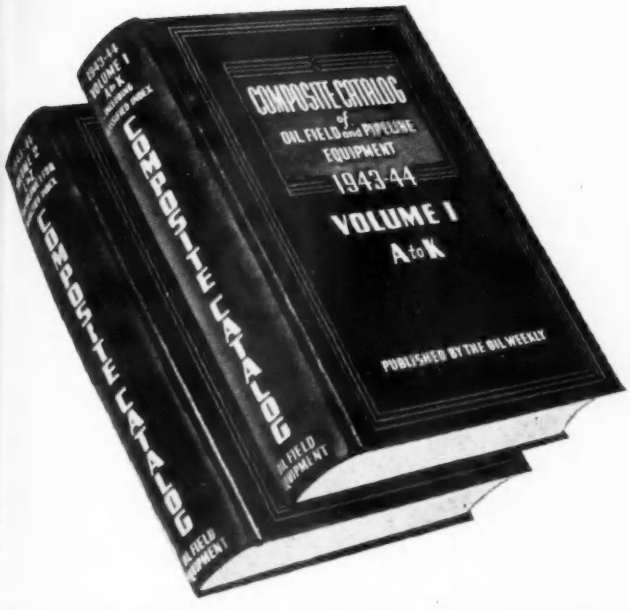

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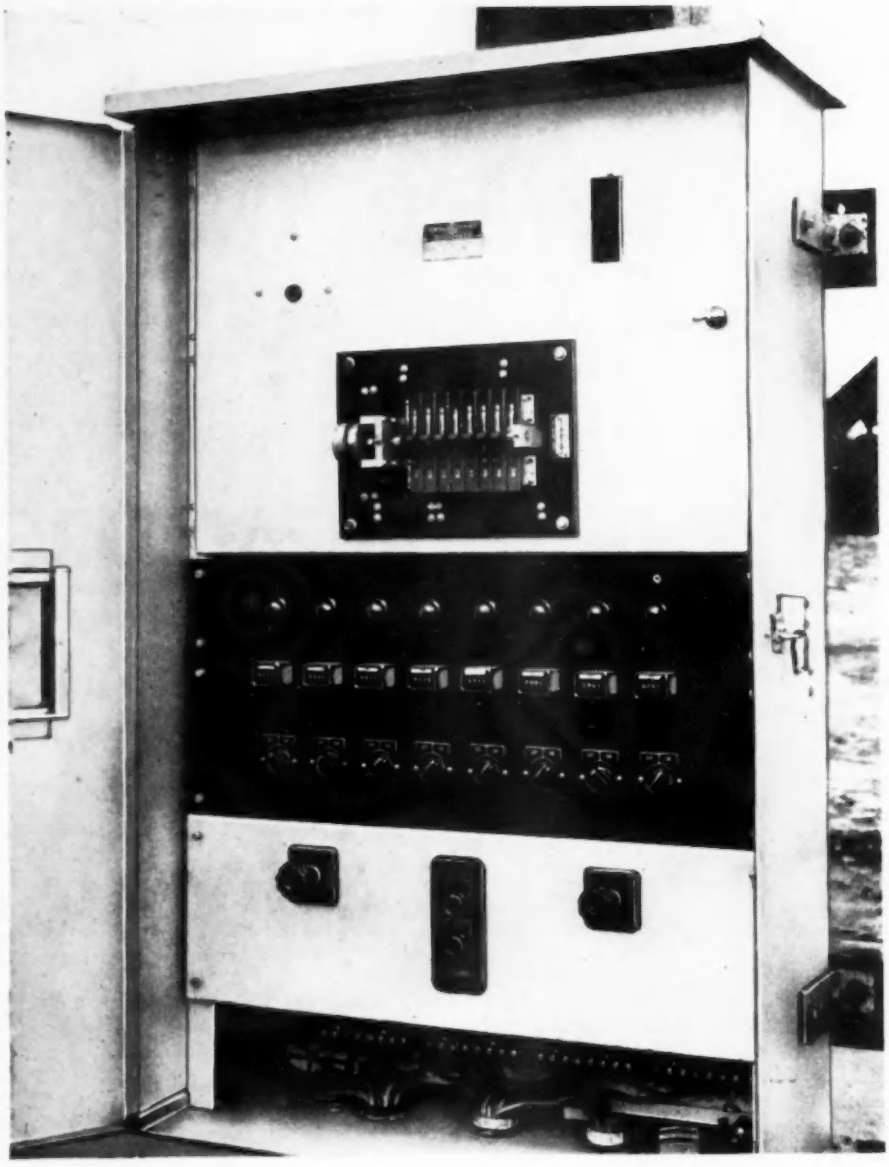

Close-up of panel board showing sequence selector at top and individual counters below.

sequence selector. It is operated by a telechron motor. On a shaft extending from the motor is a series of cams, one for each well.

Automatic Float Control

In the installation illustrated by the accompanying photos there are 6 separators, one for each well. Gas, water and sand are separated from the oil, in these combination separators and scrubbers. These 6 wells produce about 150 barrels per day each.

As the rising oil level in any particular scrubber reaches a certain height, a float automatically closes an electrical switch which opens the oil discharge line from the separator to the pump and starts the electric motor driven centrifugal pump. As the oil leaves the pump it passes into the oil-gathering lines. A system of special solenoid and electric relay switches, mounted on a nearby switch panel, regulates the order of emptying of each scrubber, and at the same time makes it impossible for more than one to be discharged through the pump at the same time.

The scrubbers are of all-welded construction, and are used as low-pressure separators in addition to their facilities for removing water and sand from the oil. A scrubber is installed, in this instance, for each well. They are tall 60-barrel tanks, slightly over 26 feet in height overall, and 5 feet in diameter. A smaller tank on the top of each scrubber serves as a trap that removes most of the gas from the incoming oil. As the oil from the well enters the top of the smaller tank, the greater percentage of the free gas breaks out and passes on out through a gas line outlet at the top.

Sand Removal

After most of the gas is liberated, the oil falls downward through a vertical pipe in the center of the large chamber. Water in the lower part of the scrubber is automatically maintained at a level somewhat lower than that in standard oil scrubbers. As the vertical pipe releases the oil at the bottom of this column of water, the oil rises to the surface, dropping out the sand as it travels upward. The sand drops into the conical bottom of the scrubber and is removed at periodic intervals by a drain valve. The extra large chamber space above the water level serves as storage for the oil, and also aids in the final separation of any free gas that may not have escaped in the smaller separating tank.

The mean oil level maintained in the chamber is held at 11 feet, 7 inches up from the bottom with the normal operating low and high levels approximately 12 inches below and above that level.

Gas pressure in the scrubber is always the pressure of the gas gathering system and conventional back pressure regulation is not necessary. The scrubber can operate at any pressure from 16 pounds on down to atmosphere.

Electrically Opearted Valves

From each scrubber a 4-inch oil discharge pipe conducts the oil to a normally closed magnetic selector valve situated near the transfer or shipping pump. This valve is operated electrically. From this valve a pipe connects into a common suction of the single centrifugal pump that is driven by a gear-reduction electric motor.

When the liquid level in the scrubber has been raised by the incoming oil to a point where the float switch is tripped, an electrical circuit is closed which stops the aforementioned cam at the proper time and simultaneously, energizes and opens the magnetic valve on the suction line for that particular scrubber, energizes the motor circuit starting the pump and energizes the circuit which controls the counter for that particular well. Because the selector has stopped during the period that any of the scrubbers are being pumped out, no other scrubber may come on or "dump" until the first unit has pumped and metered sufficient oil from the oil chamber to allow its float to fall to the point where it trips the float-switch. This opens the initial circuit and causes the circuits of all of the succeeding stages, including the magnetic selector valve, meter head micro switch and pump motor, to return to normal, or inactive positions, simultaneously starting the telechron motor and accompanying cams to hunt for other scrubbers which may have been standing ready to come on. When one is automatically found, the complete cycle is repeated.

Except for the small micro switch in the meter head, all switches, selector relays and main solenoid circuits are neatly wired up in an enclosed switch board. Manually-operated controls mounted on the inside of the switch panel box are provided for miscellaneous or emergency uses. All conduits between units and switchboard panel are laid underground.

The oil pumped out from each scrubber at the current setting of the float switches is approximately 6 barrels, and is removed in aproximately 8 minutes. Depending upon the production rate of the well producing into the particular scrubber, the emptying cycles for each scrubber occur from 15 to 25 times per 24 hours.

Piston Meters Used

The 6 lines from the 6 separators, manifolded to one line, are serviced by a single meter. On the top of this meter dial, which is a 1½" piston meter, 50 g.p.m. capacity, the simple actuating mechanism is installed. As soon as each

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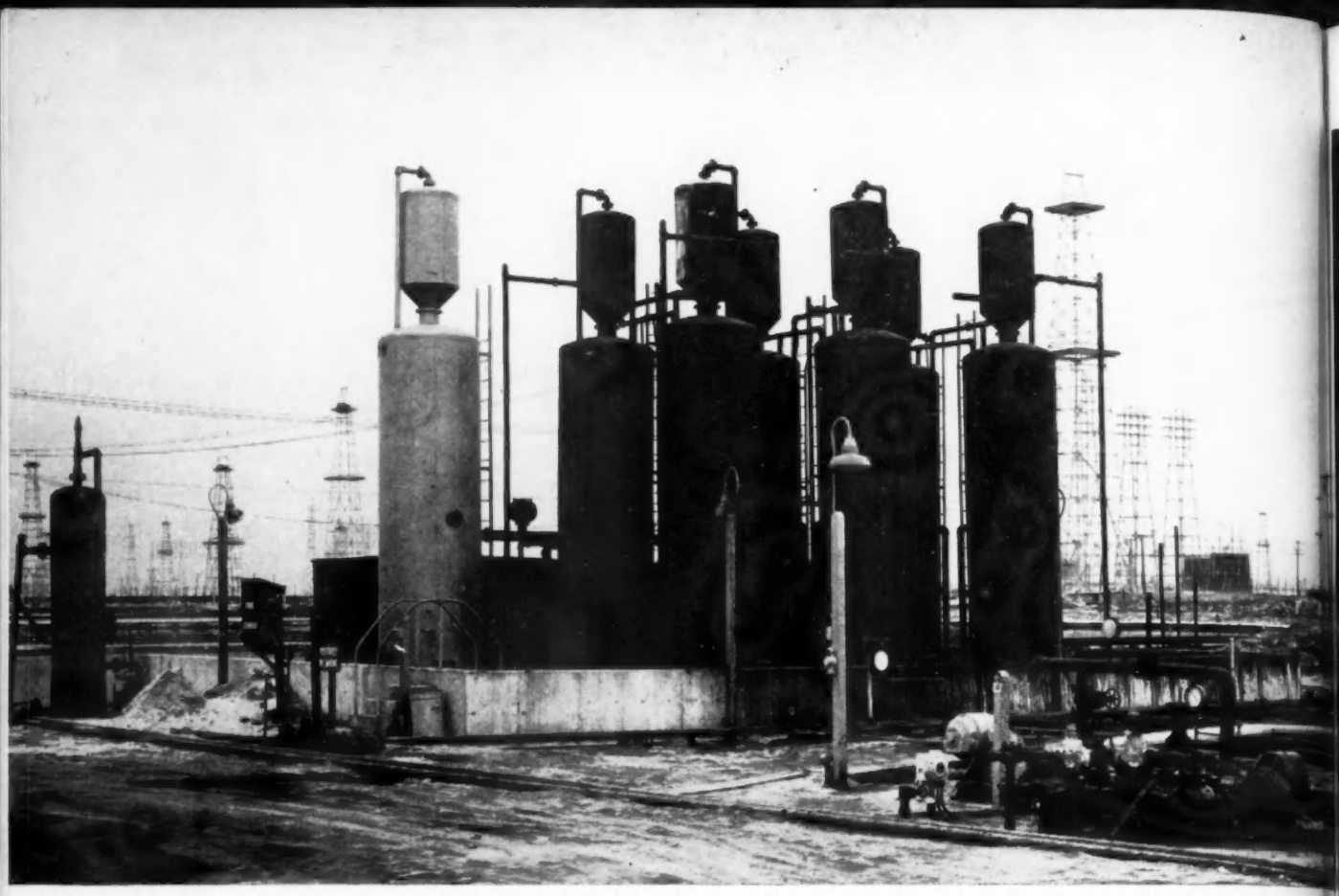


View of separators, with meter and pump hook-up in foreground.

barrel of oil has flowed through the meter, a cam actuates a small micro switch in the meter dial head and this in turn actuates the individual counter of the respective separator on the panel board. The counter records one barrel at a time.

When none of the separators is full, the mechanism and pump are idle, except for the small telechron motor which is constantly hunting for a float switch that has tripped.

The entire operation is automatic. All that the meter reader has to do is go to the panel box, look through the window and make a record of the barrels produced from each well. This can be done at any desired interval, twice a day or once per day, or to meet any accounting requirement.

Any of the separators can be selectively shut off and the other separators can be metered. Or, by turning a switch knob on the panel board, any one separator can be operated. A red light in the selector box indicates what separator is being emptied.

No gauging Necessary

Pumpers don't have to gauge the oil in tanks by this system because all the oil from the several wells is automatically metered by one meter which electrically extends the readings to individual readers and the oil goes direct to a single shipping station. This station takes all the oil from this area.

While each panel board is located in the field, it is possible to extend wires from the field to the central field office where all recordings can be centralized, which would eliminate the necessity of the meter reader going out to the field. Such a hook-up would require six lines and one return wire for each six wells.

One tremendous saving is the reduction in motor equipment. Instead of eventually installing 297 pumps and motors to handle 297 wells in this area, eight wells each can be hooked up to one unit so that a series of 38 units (38 meters and 38 pump motors) would handle the same job at a saving of hundreds of thousands of dollars. There would be only 38 units to check instead of 297. The saving in man-hours is not to be overlooked.

Economical aspects are also dependent upon location of wells, existing pipe lines, etc. When planned in advance before pipe lines from each well are laid, it is possible to make the most economical arrangement of units.

Human Error Avoided

Another advantage of this system is the elimination of error attributable to the human element. Instead of using a gauge stick or line and requiring computation, metering by this positive method precludes error so that the only work necessary is to copy onto the field production book the readings from the individual counters. This means less clerical work in the field office, less paper to buy, less traveling from well to well—savings right down the line.

Because the separator for each well cleans the oil before it goes into the pumping line, the meter is protected from sand. Metering is accomplished under as near perfect conditions as possible because the flow is absolutely uniform through the meter.

The meters are capable of handling from 10 to 80 barrels per hour, so they operate with a high degree of accuracy in the middle of their efficiency curve.

As a typical example of economical meter operation, a piston meter on one of the units, requiring overhaul, cost only $16.00 to repair after metering 570,000 barrels of oil. This figures less than ⅓c per 1000 barrels metered. In comparison with the time conserved the saving is most impressive.

Accuracy of Meters

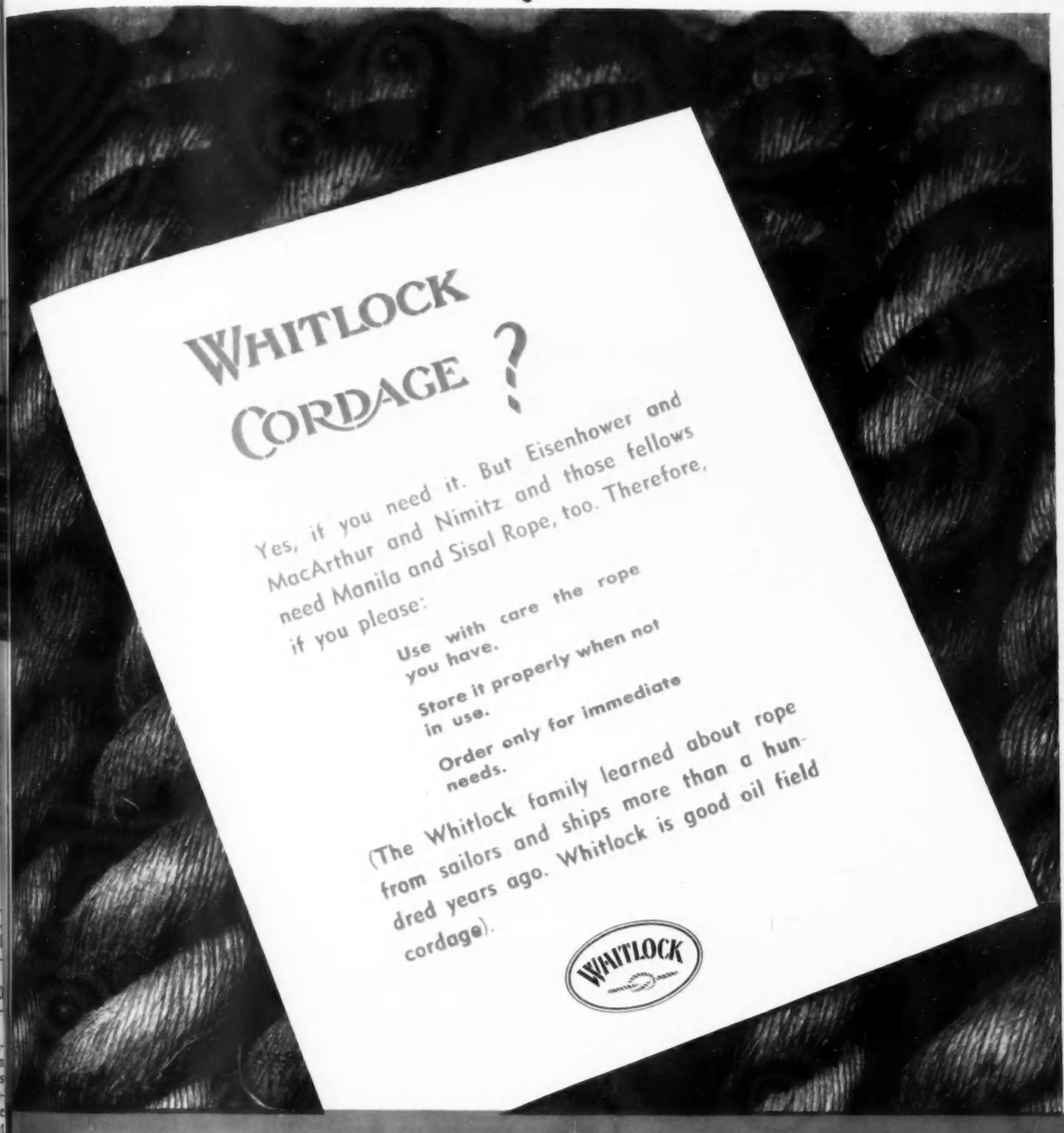
Overall efficiency of meter registration checks favorably with field production tank gauging under normal conditions as compared to the oil actually sold out of the shipping tank.

Line pressure ranges from 30 to 40 pounds for pumping from the separators to the shipping tank.

The use of this system also is eliminating another expensive operation in this field. A local ordinance provides that all tank settings must have a concrete fire-wall around them, the volume of such enclosures being 125 percent of the total volume of the tanks in each setting. Since the production is constantly being shipped, no large flow tanks are necessary.

Since the field where these multiple installations are made was brought in, more than 63,000,000 barrels of oil have been produced. The potential is far more.

The operators have found that they are able to greatly reduce labor and installation costs by using this automatic oil meter selector system and thus save critical materials. Having proved successful in this field, it will no doubt be made available to producing companies elsewhere. The same system could be adapted to metering other products.


WHITLOCK
CORDAGE ?
Yes, if you need it. But Eisenhower and MacArthur and Nimitz and those fellows need Manila and Sisal Rope, too. Therefore, if you please:
Use with care the rope you have.
Store it properly when not in use.
Order only for immediate needs.
(The Whitlock family learned about rope from sailors and ships more than a hundred years ago. Whitlock is good oil field cordage).
WHITLOCK

JONES & LAUGHLIN SUPPLY COMPANY

formerly

Frick-Reid Supply Corporation

TULSA, OKLAHOMA

Electrical Well Logging

PART 11

Fundamental Properties of Resistance Curves

By HUBERT GUYOD
Development Engineer, Halliburton Oil Well Cementing Company
Duncan, Oklahoma

TABLE 11-1
General Information Concerning the Applications of Resistance Curves

Single Point	Two-Electrode	Three-Electrode (Standard Arrangement)	Three-Electrode (Inverted Arrangement)	Four-Electrode
Logging from casing to bottom of hole	Logging from casing to bottom of hole	Logging from a short distance below casing to bottom of hole	Logging from casing to a short distance above bottom of hole	Correlations, provided spacing is less than 8 feet long
Correlations	Correlations, provided spacing is less than 3 feet	Correlations, provided spacing is less than 8 feet long	Correlations, provided spacing is less than 8 feet long	Bed thickness determination
Bed thickness determination	Bed thickness determination, provided spacing is very short	Bed thickness determination, provided correction is made when bed is thick	Bed thickness determination, provided correction is made when bed is thick	Resistivity determination for most bed thicknesses, provided spacing is more than 8 feet long
Location of junk	Resistivity determination, provided bed thickness equals several times spacing, and spacing equals 2 to 3 times hole diameter	Resistivity determination, provided spacing is more than 8 feet long	Resistivity determination, provided spacing is more than 8 feet long	Oil-water contact determination, provided spacing is more than 8 feet long
	Location of junk	Oil-water contact determination, provided spacing is more than 8 feet long	Location of junk	Location of junk
		Location of junk		

TABLE 11-2
Recommendations for the Solution of Common Problems

	USE EITHER ONE OF THE FOLLOWING CURVES	DO NOT USE
For bottom hole logging	Single-point resistance curve Two-electrode curve made with a short spacing Three-electrode curve made with standard arrangement Four-electrode curve made with a very short spacing	Two-electrode curve made with a long spacing Three-electrode made with inverted arrangement Four-electrode curve, unless spacing is very short
For logging formations below casing and for determining casing depth	Single-point resistance curve Two-electrode curve made with a short spacing Three-electrode curve made with inverted arrangement Four-electrode curve made with a very short spacing	Two-electrode curve made with a long spacing Three-electrode curve made with standard arrangement Four-electrode curve, unless spacing is very short
For correlations	Single-point resistance curve Two-electrode curve made with a short spacing Three-electrode curve (standard or inverted) made with a short or medium spacing Four-electrode curve made with a short or medium spacing	Two-electrode curve made with a long spacing Three-electrode curve made with a long spacing Four-electrode curve made with a long spacing
For bed thickness determination	Single-point resistance curve Two-electrode curve made with a short spacing Three-electrode curve (correction necessary if bed is thick) Four-electrode curve	Two-electrode curve made with a long spacing Three-electrode curve without making a correction
For resistivity determination	Two-electrode curve made with a medium or long spacing (use only on thick beds) Three-electrode curve (either arrangement) made with a medium or long spacing Four-electrode curve made with a medium or long spacing **Note:** (1) A correction is usually necessary (2) True resistivity determinations are not always possible in broken sections	Single-point resistance curve All multiple-electrode curves made with a short spacing, unless there is no mud invasion Two-electrode curve if spacing is more than one-half bed thickness
For determining depth of oil-water contact in a bed	Three-electrode curve (standard arrangement) made with a medium or long spacing Four-electrode curve made with a medium or long spacing	Single-point resistance curve, unless there is no mud invasion Two-electrode curve, unless there is no other curve available Three-electrode curve (standard arrangement) made with a short spacing, unless there is only a small degree of mud invasion Three-electrode curve made with inverted arrangement (all spacings) Four-electrode curve made with a short spacing, unless there is only a small degree of mud invasion
For locating junk	Any resistance curve	
For logging cased holes	No resistance method can log cased holes	

THE preceding discussions (starting in the August 7 issue of THE OIL WEEKLY and appearing in consecutive issues thereafter except the September 25 issue) have explained in some detail the response of each conventional resistance method over a wide range of conditions. As the resulting data are distributed in several articles, it has been thought advisable to condense them in a few pages for easy reference.

Figures 11-1 to 11-5 represent the most typical curves given by each logging system, whereas Tables 11-1 and 11-2 summarize the fundamental properties and applications of each method.

On the opposite page the fundamental properties of 1 (the single-point resistance curves, (2 the two-electrode curves, and (3 the three-electrode curves) (standard arrangement) are shown in four columns in the three figures.

The first column represents a thin resistant bed; the second a resistant bed of medium thickness; the third, thick resistant bed and the fourth a conductive bed. *Note that in all the drawings dotted lines represent true resistivity and solid lines apparent resistivity.*

On page 50 appear Figures 11-4 and 11-5 showing, respectively, fundamental properties of four-electrode curves and fundamental properties of three-electrode curves (inverted arrangement).

Part 12 of this series will appear in an early issue.

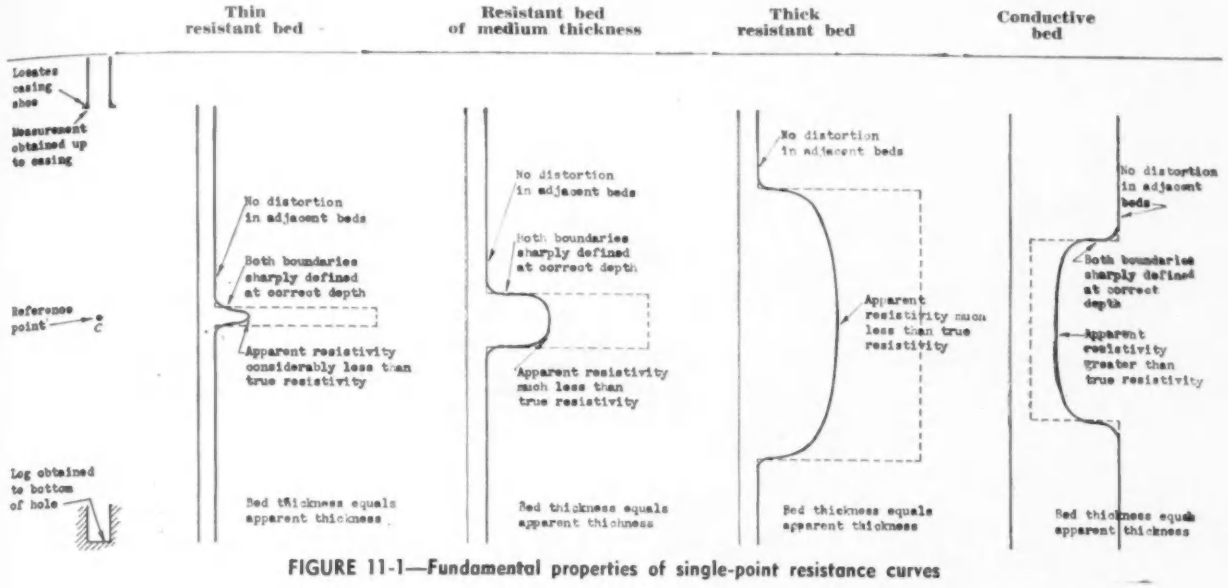

Thin resistant bed
Resistant bed of medium thickness
Thick resistant bed
Conductive bed
Locates casing shoe
Measurement obtained up to casing
Reference point
C
Log obtained to bottom of hole
No distortion in adjacent beds
Both boundaries sharply defined at correct depth
Apparent resistivity considerably less than true resistivity
Bed thickness equals apparent thickness
No distortion in adjacent beds
Both boundaries sharply defined at correct depth
Apparent resistivity much less than true resistivity
Bed thickness equals apparent thickness
No distortion in adjacent beds
Apparent resistivity much less than true resistivity
Bed thickness equals apparent thickness
No distortion in adjacent beds
Both boundaries sharply defined at correct depth
Apparent resistivity greater than true resistivity
Bed thickness equals apparent thickness

FIGURE 11-1—Fundamental properties of single-point resistance curves

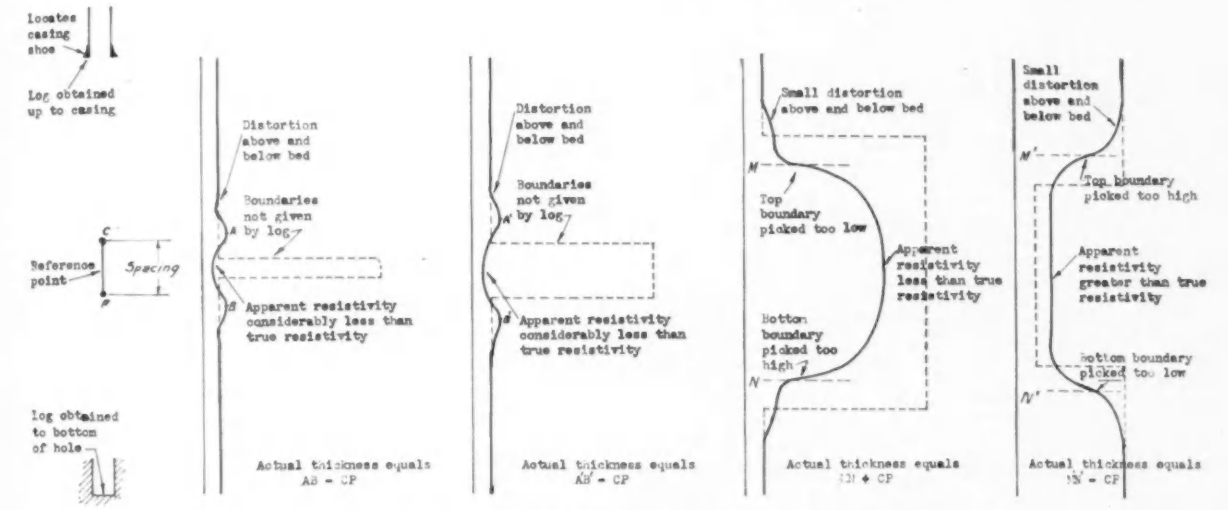


FIGURE 11-2—Fundamental properties of two-electrode curves

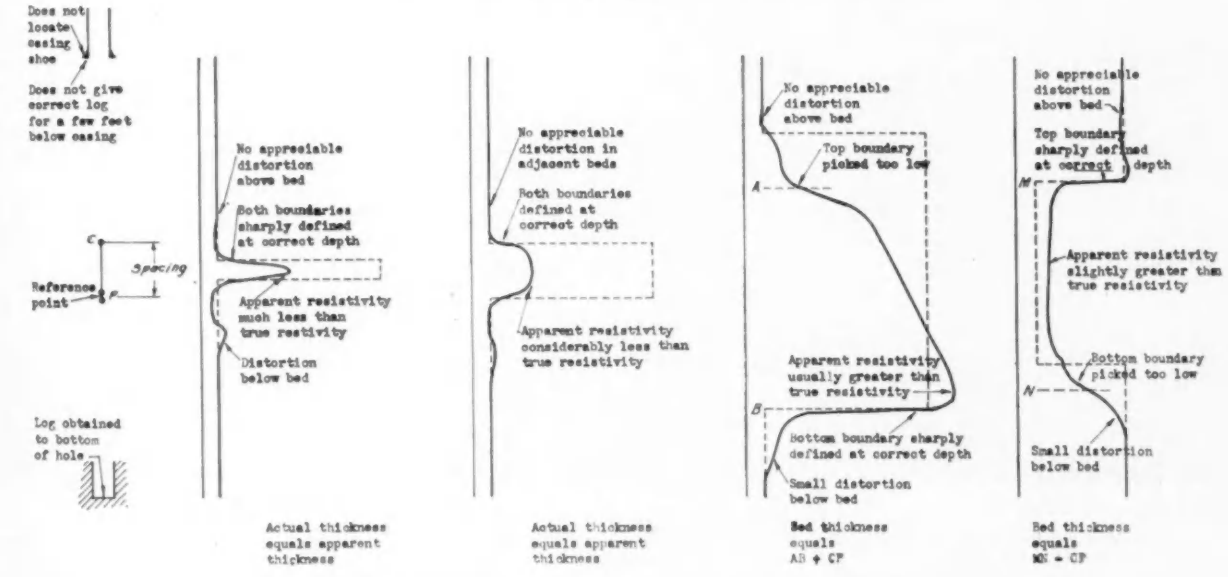

Does not locate casing shoe
Does not give correct log for a few feet below casing
C
Spacing
Reference point
P
Log obtained to bottom of hole
No appreciable distortion above bed
Both boundaries sharply defined at correct depth
Apparent resistivity much less than true resistivity
Distortion below bed
Actual thickness equals apparent thickness
No appreciable distortion in adjacent beds
Both boundaries defined at correct depth
Apparent resistivity considerably less than true resistivity
Actual thickness equals apparent thickness
No appreciable distortion above bed
Top boundary picked too low
A
Apparent resistivity usually greater than true resistivity
B
Bottom boundary sharply defined at correct depth
Small distortion below bed
Bed thickness equals AB + CP
No appreciable distortion above bed
Top boundary sharply defined at correct depth
M
Apparent resistivity slightly greater than true resistivity
Bottom boundary picked too low
N
Small distortion below bed
Bed thickness equals MN - CP

FIGURE 11-3—Fundamental properties of three-electrode curves (standard arrangement)

NOTE—In all drawings dotted lines represent true resistivity and solid lines apparent resistivity.

Electrical Well Logging Charts

(See Also Pages 48 and 49)

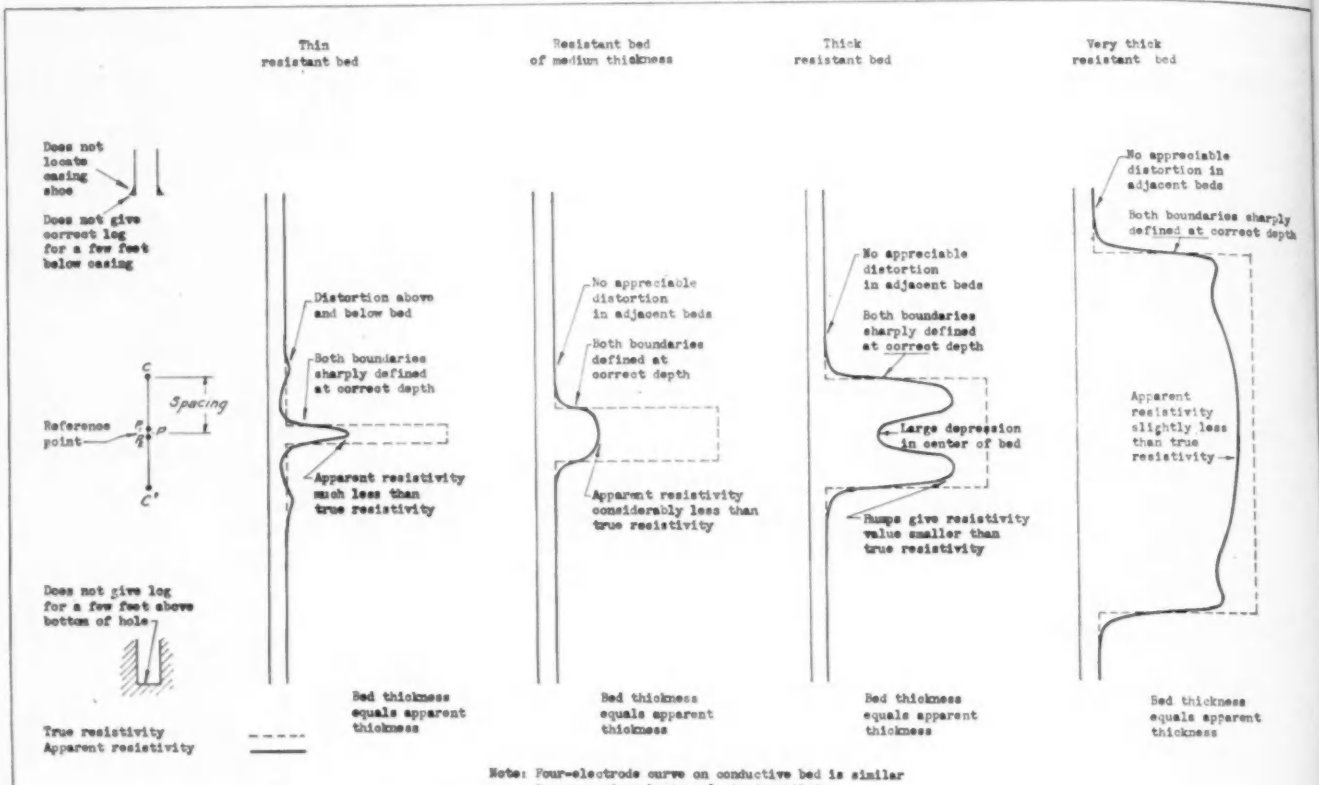

Thin resistant bed
Resistant bed of medium thickness
Thick resistant bed
Very thick resistant bed
Does not locate casing shoe
Does not give correct log for a few feet below casing
Spacing
Reference point
Distortion above and below bed
Both boundaries sharply defined at correct depth
Apparent resistivity much less than true resistivity
No appreciable distortion in adjacent beds
Both boundaries defined at correct depth
Apparent resistivity considerably less than true resistivity
No appreciable distortion in adjacent beds
Both boundaries sharply defined at correct depth
Large depression in center of bed
Humps give resistivity value smaller than true resistivity
No appreciable distortion in adjacent beds
Both boundaries sharply defined at correct depth
Apparent resistivity slightly less than true resistivity
Does not give log for a few feet above bottom of hole
Bed thickness equals apparent thickness
Bed thickness equals apparent thickness
Bed thickness equals apparent thickness
Bed thickness equals apparent thickness
True resistivity
Apparent resistivity
Note: Four-electrode curve on conductive bed is similar to curve given by two-electrode method

FIGURE 11-4—Fundamental properties of four-electrode curves

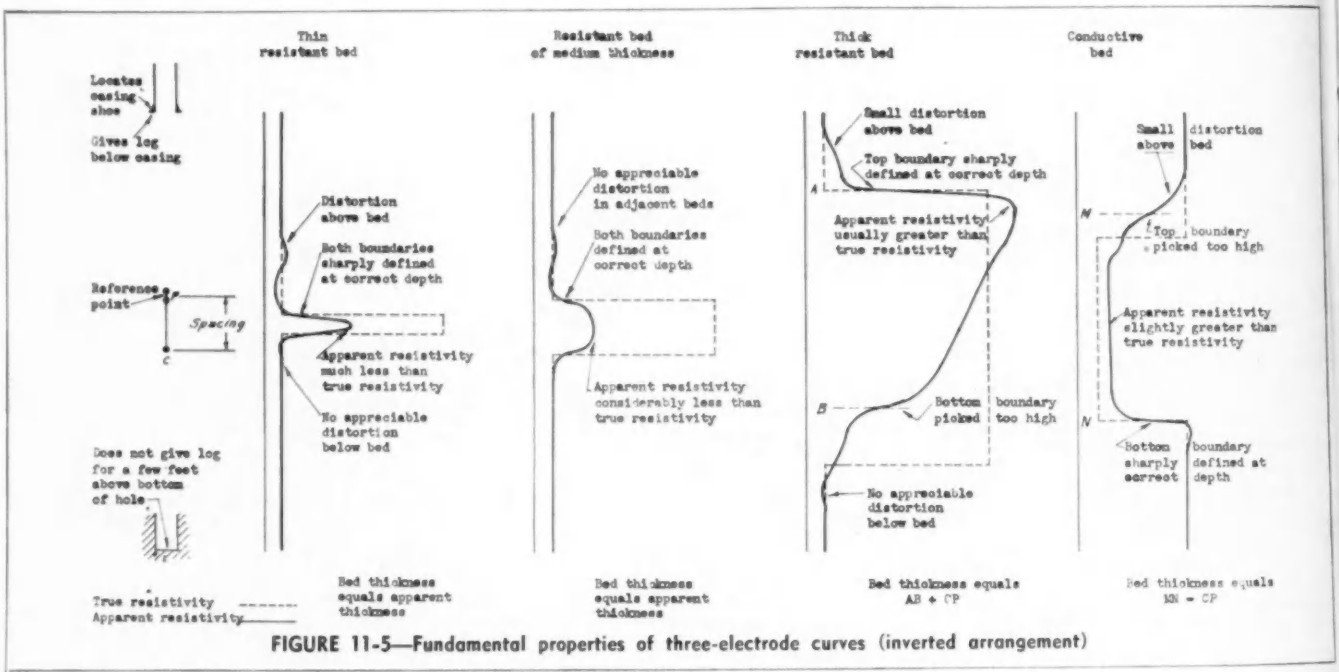

Thin resistant bed
Resistant bed of medium thickness
Thick resistant bed
Conductive bed
Locates casing shoe
Gives log below casing
Spacing
Reference point
Distortion above bed
Both boundaries sharply defined at correct depth
Apparent resistivity much less than true resistivity
No appreciable distortion below bed
No appreciable distortion in adjacent beds
Both boundaries defined at correct depth
Apparent resistivity considerably less than true resistivity
Small distortion above bed
Top boundary sharply defined at correct depth
Apparent resistivity usually greater than true resistivity
Bottom boundary picked too high
No appreciable distortion below bed
Small distortion above bed
Top boundary picked too high
Apparent resistivity slightly greater than true resistivity
Bottom boundary sharply defined at correct depth
Does not give log for a few feet above bottom of hole
Bed thickness equals apparent thickness
Bed thickness equals apparent thickness
Bed thickness equals AB + CP
Bed thickness equals MN = CP
True resistivity
Apparent resistivity

FIGURE 11-5—Fundamental properties of three-electrode curves (inverted arrangement)

Changes Announced for Committees of PIWC

Changes in the membership of important committees of the Petroleum Industry War Council were announced last week by Chairman William R. Boyd, Jr.. as follows:

Committee on National Oil Policy: Alfred Jacobsen, president of the Amerada Petroleum Corporation, to be chairman to fill the vacancy created by the death of John A. Brown: B. Brewster Jennings, successor to Brown as president of Socony-Vacuum Oil Company and as a member of the council, to be a member; Dr. Joseph E. Pogue, vice president of the Chase National Bank, to be a non-Council member.

Committee on Petroleum Economics: W. Alton Jones, president of Cities Service Company, to be a member as chairman of the General Committee of District 1; B. Brewster Jennings, to be a member to succeed Brown.

Committee on Supply and Transportation: B. I. Graves, vice president of the Tide Water Associated Oil Company, to be chairman, succeeding W. Alton Jones who will continue as a member.

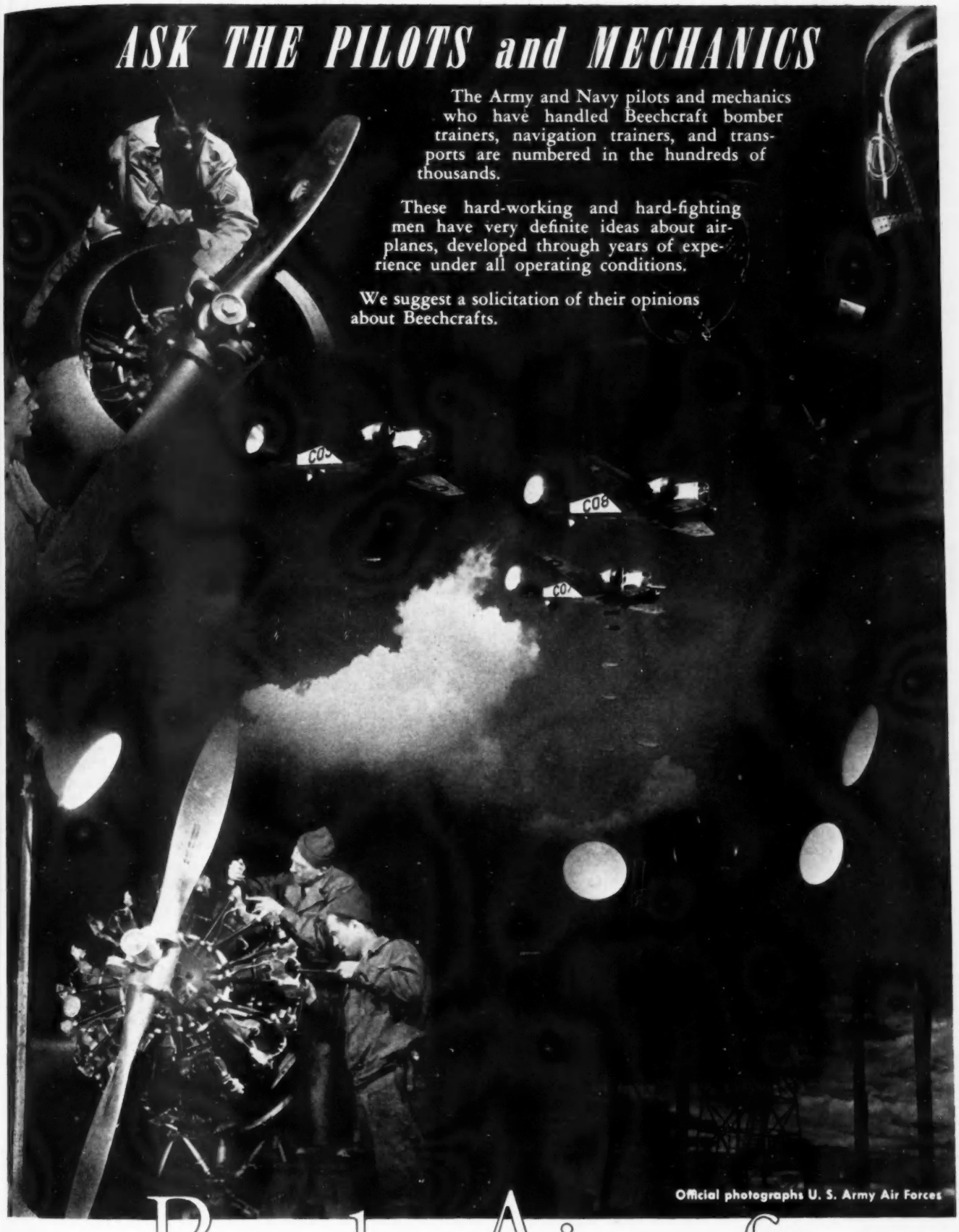
Committee on Renegotiation: B. Brewster Jennings, to be a member to succeed Brown.

ASK THE PILOTS and MECHANICS

The Army and Navy pilots and mechanics who have handled Beechcraft bomber trainers, navigation trainers, and transports are numbered in the hundreds of thousands.

These hard-working and hard-fighting men have very definite ideas about airplanes, developed through years of experience under all operating conditions.

We suggest a solicitation of their opinions about Beechcrafts.



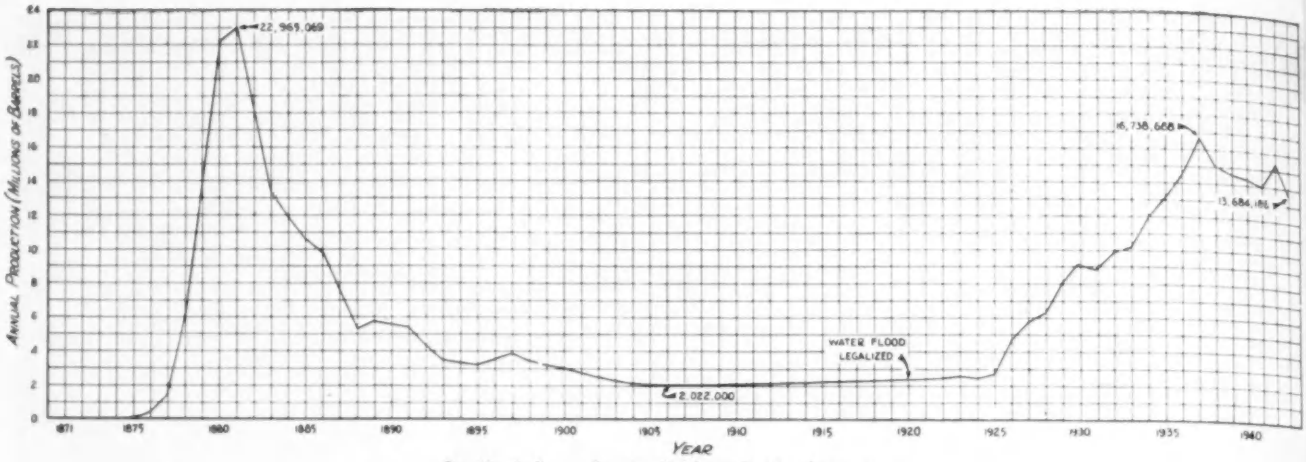
Official photographs U. S. Army Air Forces

Beech Aircraft

CORPORATION

BEECHCRAFTS ARE DOING THEIR PART

WICHITA, KANSAS, U. S. A.



Bradford, Pennsylvania, field production by years

Bradford's Water-Flood Recovery

By GEORGE O. IVES, Staff Writer

WATER-FLOODING has accounted for recovery of almost as much oil in the Bradford, Pennsylvania, field as has been produced by natural or primary methods, and in time water-flood operations are expected to be responsible for more oil than primary methods.

From discovery in 1871, until May 1, 1944, Bradford has produced 460,245,322 barrels of crude, according to figures compiled by **The Producers Monthly.** Of this amount 246,753,253 barrels have been produced by primary methods, and 213,492,069 barrels additional has been produced from the 60,000 acres of the field under water-flooding operations. It is estimated that with full secondary development of the remaining 25,000 acres, another 100,000,000 barrels of oil will be recovered with present methods.

Peak production in the field was reached in 1881, ten years after discovery, when it produced 22,945,069 barrels naturally, but the decline was rapid, falling to 5,306,042 barrels in 1888, 7 years later, and then more slowly to a low of 2,022,000 barrels in 1906. Before this time the beneficial effects of flooding had been noted, following accidental cases caused by improper casing or plugging of wells, and there followed a period of cautious experiment and observation until in 1920 flooding was legalized by the state of Pennsylvania. By 1925, with introduction of line flood, core analysis, and tubed intakes, production had reached just under 3,000,000 barrels, jumping to 4,725,252 barrels in 1926, and then steadily upward to a secondary peak of 16,738,688 barrels in 1937. In 1943 the field produced 13,684,186 barrels, nearly 2,000,000 less than in 1942.

The reservoir is a well defined, continuous sand body, lending itself readily to flooding operations, and careful records of production, correlated with core analysis and other factors have made it possible to calculate recovery per acre from any property or area in the field within practical limits. On the five-spot well pattern, one well develops 1.22 acres and a comprehensive study shows that recovery per acre for wells drilled in the past several years varies from as low as 2000 barrels to as high as 6500 barrels, with a weighted average around 3800 barrels. Thus it may be calculated that drilling of 100 wells during any period should develop 122 acres with resultant ultimate recovery of 463,600 barrels of crude. Any increase or decrease in drilling activity has a direct effect on the production from the field.

Typical curves of oil recovery by flooding show a time lag of 9 months between a peak in drilling and resultant increase in production, the same time interval being apparent in case of decreased drilling activity and decreased production.

The rate at which the oil is producible has also been calculated after careful surveys, taking into account the several methods of production in use on the various projects, and it is possible to say within reasonable limits just what percentage of the oil will be produced each year. The following table shows recovery by years from an average Bradford water-flooding project:

YEAR	Yearly Percentage	Cumulative Percentage
1st	17	17
2nd	36	53
3rd	19	72
4th	10	82
5th	6	88
6th	4	92
7th	3	95
8th	2	97
9th	2	99
10th	1	100

The hypothetical 100-well project, therefore, should result in recovery of 78,812 barrels the first year, and 166,896 barrels the second, total for the first two years being 245,708 barrels or more than half total recovery expected from the project over a 10-year period.

Development costs in this field can safely be estimated at not more than $3,500 per acre but operating costs are variable, dependent upon so many different factors and conditions that an estimate is necessarily tentative. Even with the same type of equipment, costs for specific items vary with rates of operation.. For instance, at 450 pounds pump-discharge pressure with electric equipment cost for water injection power is $.002 per barrel, while at 1600 pounds, cost is $.007 per barrel. In general it might be said that water injection costs will run something like $2,250 per acre over a 10-year period. Administrative, supervisory, and oil-lifting costs will be additional.

Although a true decline curve for production from areas is difficult to obtain since subsequent increments of development sometimes obscure the true decline curve, a characteristic curve for individual wells shows peak production reached in 1 to 1½ years. Although this peak on some properties yielding as much as 6000 barrels per acre may reach 9 or 10 barrels and then decline to a barrel a day or less within 5½ years, other wells on properties showing the same ultimate recovery may have peak production of only 6 barrels before commencing to decline.

Cooperative Research Plan

Through cooperative research, many technical problems of increasing recovery through increased efficiency of flooding operations have been solved. Many more remain to be solved, and for a number of years a group of Bradford operators, with assistance from the state, have been carrying on a flood production research project at Pennsylvania State College upon which $150,000 has already been expended. Recovery is being increased by higher pressures, higher water velocities, and selective shooting, using valuable data on oil and water content, grain size, and permeability of sand acquired through core analysis.

In spite of this, core records in flooded areas of the field show there still remains a residual oil total in the field of possibly 7000 barrels per acre even after water-flooding. Also it has been shown that inefficient flooding in many parts of the field has left as much as 50 percent of the sand still unaffected. It is hoped that applied technological research will result in development of methods for the recovery of much of this remaining 500,000,000 barrels of oil, whether by presently undiscovered water-flooding techniques, or by some other method or methods.

Exploration Rate Below Goal But Results Fair

The Oil Weekly's monthly record of exploratory drilling and appraisal of new fields, pay zones, and field extensions.

Data compiled by District Editors and coordinated by L. J. LOGAN, Associate Editor

EXPLORATORY drilling has been proceeding upon an expanded rate fairly well in line with but not equaling the increase in total drilling. In the first nine months of this year, completions of exploratory tests averaged 81 per week, an increase of 19 percent over the 68 weekly of the corresponding months last year. (All completions showed an increase of 26.8 percent, as reported October 16, page 76.)

Among the pioneering tests this year, 18.6 percent have been productive, a slightly better record than last year, when 17.7 percent were producers. Therefore, productive completions are up 25.4 percent.

For the month of September, there were 86 exploratory completions per week, a decline from the 97 weekly of August, but 19.8 percent of September tests were productive, against 18.6 percent the month before.

Despite increased development, exploratory completions will fall short of the government goal of 5000 for 1944, unless the remaining months bring a pronounced stepping up of activity. Mere continuation of the September rate would result in only approximately 4300 tests for this year, although that number would be well above the 3599 recorded for 1943 (January 31, 1944, page 98.) For the year 1945 the official goal again will be 5000 exploratory tests, under the program recently announced by PAW.

While productive exploratory completions totaled 603 for the first nine months of this year or 25.4 percent more than the 481 of the like period last year, approximately that same percentage of increase was recorded for new discoveries of fields and pay horizons and for extensions to established fields.

It is significant that relatively poorer

■ CONTINUED ON PAGE 56

TABLES ON PAGES 54 AND 55

Summary of Results of Exploratory Drilling

ITEM	Aug. 1944	Sept. 1944	NINE MONTHS JAN.-SEPT. 1943	1944	Percent Diff.
Oil Discoveries	49	37	300	338	+ 12.7
New Fields	38	25	205	233	+ 13.7
New Pays	11	12	95	105	+ 10.5
Distillate Discoveries	3	5	18	32	+ 77.7
New Fields	2	4	14	23	+ 64.3
New Pays	1	1	4	9	+125.0
Gas Discoveries	21	9	51	94	+ 84.3
New Fields	19	9	41	82	+100.0
New Pays	2	.....	10	12	+ 20.0
Total Discoveries	73	51	369	464	+ 25.7
Extensions to Fields	18	17	112	139	+ 24.1
Oil Fields	14	15	100	106	+ 6.0
Distillate Fields	3	1	3	24	+700.0
Gas Fields	1	1	9	9	.....
***Total Prod. Tests**	91	68	481	603	+ 25.4
Dry Holes	395	274	2,165	2,647	+ 22.3
(Weekly Average)	79	69	56	66	+ 17.9
Wildcats	383	270	2,131	2,572	+ 20.7
New Pays	1	1	.....	14	.....
Outposts	11	3	34	61	+ 79.4
Total Expl'tory Tests	486	342	2,646	3,250	+ 22.8
(Weekly Average)	97	86	68	81	+ 19.1
Percent Productive: (Weekly Average)	18.6	19.8	17.7	18.6	.....
Percent Dry: (Weekly Average)	81.4	80.2	82.3	81.4	.....

* Data for Calendar Month.

Dry hole completions are from weekly reports and totals represent completions for 5 weeks in August, 1944; 4 weeks in September, 1944; 39 weeks in Jan.-Sept., 1943; and 40 weeks in Jan.-Sept., 1944.

Results of Exploratory Drilling in September and First 9 Months, 1944-1943, by Districts

STATE OR DISTRICT	SEPTEMBER 1944															FIRST NINE MONTHS 1944																	
	Productive Tests									Unproductive Tests				Total Exploratory Tests		Productive Tests									Total Productive		Unproductive Tests				Total Dry		Total Exploratory Tests	
	New Fields			New Pays			Extensions			Total Productive	Wildcats	New Pays	Outposts	Total Dry			New Fields			New Pays			Extensions			9 Mo. 1944	9 Mo. 1943	Wildcats	New Pays	Outposts	9 Mo. 1944	9 Mo. 1943	9 Mo. 1944	9 Mo. 1943
	Oil	Gas	Dis.	Oil	Gas	Dis.	Oil	Gas	Dis.							Oil	Gas	Dis.	Oil	Gas	Dis.	Oil	Gas	Dis.										
Alabama							2			2	5			5	7	1						2			3		14		2	16	2	19	2
Arizona																											6			6	4	6	4
Arkansas											3			3	3	2		2				4			8	11	51		1	52	51	60	62
California	2									2	9		1	10	12	13	7		4	1		4	1		30	17	212		1	213	120	243	137
Colorado							2			2	1			1	3	1				1		3			5	1	5			5	3	10	4
Florida																											1			1	1	1	1
Georgia											2			2	2												7			7	2	7	2
Illinois	1			2			4			7	29			29	36	15		1	29			20			65	101	274			274	266	339	367
Indiana	1									1	9			9	10	6			1			2			9	7	43			43	66	52	73
Iowa																											2			2	3	2	3
Kansas	4	2								6	28			28	34	40	11					4			55	48	313		6	319	301	374	349
Kentucky	2			3						5	10			10	15	12	5	4	3			2			26	17	89			89	73	115	90
Louisiana	1	1				1				3	10			10	13	6	3	5	8	1	3	3		1	30	32	87		16	103	77	133	109
North		1								1	7			7	8	2	2	1		1	1	1		1	9	9	53		12	65	61	74	70
South	1					1				2	3			3	5	4	1	4	8		2	2			21	23	34		4	38	16	59	39
Michigan				2						2	13			13	15	9	1		2			2			14	23	160	1		161	144	175	167
Mississippi	1		1				1			3	7			7	10	2		1				1			4	2	56		11	67	42	71	44
Missouri											1			1	1											3	5			5	17	5	20
Montana		2								2					2		3		1			1			5	5	17		1	18	11	23	16
Nebraska																											7			7	29	7	29
New Mexico							1			1	5			5	6	2	3		1			2			8	6	40			40	38	48	44
Ohio	1	2					1	1		5	11			11	16	2	16					2	16		36		58			58		94	
Oklahoma	6	1								7	26			26	33	26	12		3	2		10	2		55	41	173		3	176	198	231	239
Tennessee																											4			4	1	4	1
Texas	6	1	3	3			4		1	18	99	1	1	101	119	91	19	10	47	6	6	42	5	8	234	157	933	12	18	963	710	1197	867
E. Tex. Bord.											1			1	1								3	2	5	2	11			11	3	16	5
Rest of E. Tex.				1						1	10			10	11	5			7		1				13	7	87	1	1	89	66	102	73
North Texas	3			1						4	26	1		27	31	26	1		14	1		6			48	46	226	2		228	177	276	223
W. Central											12			12	12	9			7	1					17	12	85	1		86	86	103	98
West Texas							2			2	5			5	7	15	2		4			16			37	16	127	6	5	138	54	175	70
Panhandle																											5	1		6	3	6	3
Upper Coast	1	1							1	3	16			16	19	7	3	2	3	2	2	6	1	2	28	20	100		3	103	66	131	86
Lower Coast	1		3	1			2			7	14		1	15	22	20	9	7	8	1	3	6	1	3	58	35	138		6	144	115	202	150
Southwest	1									1	10			10	11	7	4	1	4	1		8			25	18	112		3	115	105	140	123
S. Central				1						1	5			5	6	2			1					1	4	1	42	1		43	35	47	36
Utah																												1		1		1	
West Virginia																2	2								2		2			2		4	
Wyoming				1						1	2		1	3	4	5			5	1		2			13	10	13		2	15	6	28	16
Total U.S.	25	9	4	11		2	15	1	1	68	270	1	3	274	342	233	82	23	105	12	9	106	24	9	603	481	2572	14	61	2647	2165	3250	2646

New Oil and Gas Fields and New Pay Horizons Discovered in the United States in August, 1944

Also Important Extensions to Established Fields

COUNTY	FIELD	COMPANY, WELL AND LOCATION	Date Spudded	Date Completed	Total Depth (Feet)	Completion Horizon (Feet)	[1]Name, Character and Age of Producing Formation	[2]Initial Production Method and Choke	Gravity of Oil	[3]Structure: [4]Method of Discovery	Tentative Evaluation of Discovery or Extension
		ALABAMA—Oil Field Extensions									
Choctaw	Gilbertown	H. L. Hunt's Robert Land 2, c sw ne 36-11n-5w	.....	9- -44	5280	2832-2838	Eutaw sd; U. Cre.	P 50; 35 wtr.	18	Ant, geol, geop	2 mi w of Scruggs 1 (below); 4 mi w of original Gilbertown pl.
Choctaw	Gilbertown	H. L. Hunt's W. S. Scruggs 1, c se ne 32-11n-4w	.....	9- -44	3832	3460-3501	Eutaw sd; U. Cre.	P 50; 3 wtr.	19	Ant, geol;geop.	2 mi w original pool.
		CALIFORNIA—New Oil Fields									
Kern	Race Track Hills	British-American-Capital Co.'s Portals 53, se ne 3-30-29, 2 mi n Edison fd.	7-16-44	9—16—44	4770	4735-4766	Olcese sd; Mio.	F 240; ½"	38	Flt; geol.	Deeper Vedder sd offers greater possibilities.
Kern	Sheep Springs	Rothschild-Bender Operations' Sheep Springs 2, se se 17-29-21, 2 mi sw Belridge prod.	8-29-44	9-22-44	3484	3450-3487	Carneros; Mio.	F 800; $\frac{5}{16}$"	25	Ant; geol.	May not embrace over 300 acres.
		COLORADO—Oil Field Extensions									
Jackson	McCallum	Continental's Pollock B-2, c se ne 3-9-79	.....	9- -44	5085	-4988	Lakota sd; Cre.	F 224	....	Ant; geol.	½ mi ne extension.
Rio Blanco	Rangely	Wasatch Prod. Co.'s McLaughlin 1, nw nw ne 32-2n-102w	.....	9-30-44	6236	-6236	Weber sd	F 408; ¼"	....	Ant; geol.	1 mi se extension.
		ILLINOIS—New Oil Field									
White	Concord, S.	Etna Oil (Great Lakes Carbon's) Burrus 1, sw ne se 7-7s-10e	.....	9-12-44	2322	2310-2315	Tar Springs sd; Miss.	P 50	....	.....	Probably small. Tar Springs tests dry ½ mi ne and 1 mi e.
		ILLINOIS—New Oil Pays									
Wabash	Patton, W	Bell Bros.'s Green 3, ne se ne 29-1n-12w	7-22-44	9-12-44	2325	2313-2325	Levias sd; Miss.	P 7; 50 wtr.	....	.....	Probably small.
Hamilton	Dale-Hoodville	Pure's Union Central Life 3, ne se se 36-5s-6e	7-27-44	9-12-44	3085	2938-2952	Paint Crk sd; Miss.	P 42	....	.....	Indicates more prod, longer life for large pool.
		ILLINOIS—Oil Field Extensions									
Clay	Clay City	Cone-Pure's Miller A-1, sw sw nw 24-2n-7e	8-10-44	9-12-44	3060	2998-3060	McClosky li; Miss.	.....	....	.....	Indicates prod on sevrl hundred ac to w, sw and s.
Franklin	Whittington, W	Randall's U. S. Coal 1, nw sw sw 14-5s-2e	7- 8-44	9-12-44	2716	2678-2716	Aux Vases sd; Miss.	P 42	....	.....	1 mi sw discovery well; nearest dry holes 1½ mi se.
Hamilton	Bolle Prairie	Phillips' Leech 1, se se ne 12-4s-6e	8-14-44	10- 3-44	3450	3420-3426	McClosky li; Miss.	P 85; 85 wtr.	....	.....	Promises small prod on 1½ sq mi around well.
Jefferson	Roaches, N.	Nat. Assn. Pet. Corp's Casner O&G 1, sw sw se 5-2s-1e	8-15-44	9-12-44	1900	1885-1900	Bethel sd; Miss.	146	....	.....	Good extnsn to expanding pool. Possibilities good to n and nw, but dry Bethel tests 1½ mi ne, ¾ mi se, 1¾ mi s.
		INDIANA—New Oil Field									
Pike	Cato	H. C. Dietrich's Knick 1, se nw nw 8-1s-7w	.....	9- -44	1140	1135-1140	Cypress sd; Miss.	P 18; 5 wtr.	....	.....	.....
		KANSAS—New Oil Fields									
Ellis	Pleasanton	Sunray's Orth 1, ne ne sw 2-14s-20w, 6 mi nw Kraus pool	.....	9-24-44	3852	3835-3843	Reagan sd; Cam.	F 563	37.6	Ant; seis-grv.	Possible reserve 7000 bbl per ac.
Greenwood	Unnamed	K. T. Weidman's Peterson 1, se ne ne 19-27s-11e	.....	9- 3-44	2467	2406-2407	Arbuckle li; Ord.	P 25	....	Str trp; dr.	Unimportant; may cover 200 ac.
Pratt	Ludwick	Skelly's Shaw 1, nwc 4-29s-13w, 8 mi sw Chitwood pool	.....	9- 2-44	4587	4489-4495	Simpson sd; Ord.	P 142	....	Str trp; seis, sub.	No development near; probably small area.
Sedgwick	Clearwater	Bratine-Sandy Holl's Sutter 1, sec ne 22-29s-2w	.....	9-19-44	3036	3035-3036	Lansing li; Penn.	P 205; 55 wtr.	....	Str trp; sub.	Undetermined.
		KANSAS—New Gas Fields									
Kearny	.....	Carter's Strong 1, c nw ne 27-22s-35w, 12 mi n Hugoton gas fd.	.....	9-16-44	3002	2588-2609	Ft. Riley li; Perm.	F 10.6 miln.	gas	Str trp; sub.	On Hugoton trend on large monoclinal feature; accumulation due to porosity of sect.
Kiowa	Unnamed	Lion's Alford 1, sec sw 14-30s-19w, 12 mi sw Greensburg	.....	9-15-44	5113	5038-5053	Miss li; Miss.	F 3.2	gas	Ant; sub, seis.	First commercial prod. in county.
		KENTUCKY—New Oil Fields									
Daviess	Curdsville	Shell's Hamilton 1, 14-C-27, 4 mi s Birk City pool	.....	9- -44	1845	1835-1845	Cypress sd; U. Miss.	P 40	....	.....	.....
Henderson	Rock Springs	Nat. Assn. Pet. Co.'s Rudy 1, 4-O-23	.....	9- -44	2251	2246-2251	Cypress sd; U. Miss.	P 70	....	.....	.....
		KENTUCKY—New Oil Pays									
Henderson	McKinley	Sohio's Porter 1, 4-N-25	.....	9- -44	665	619- 665	Penn. sd; Penn.	P 60	....	.....	.....
Henderson	Smith-Mills	C. D. Burbank's Fee 10, 3-P-21	.....	9- -44	1922	1912-1922	Tar Spgs. sd; U. Miss.	P 52	....	.....	.....
Union	Powell's Lake	Gulf's Rankin 2, 16-Q-20	.....	9- -44	1214	1184-1214	Penn. sd; Penn.	P 125	....	.....	Rankin 1, disc. last month, prod fr Waltersburg sd 1811-1824 ft; also small pumper.
		NORTH LOUISIANA—New Gas Field									
Webster	.....	Carter's N. P. Davis 1, c ne ne 33-18n-8w	.....	9- -44	7000	5465-5550	L. Cre.	F 2.8 mln; ¼"	gas	.....	Hope Nat. Gas Co. taking gas.
		SOUTH LOUISIANA—New Oil Field									
St. Charles	Good Hope	Pure's General Am. Trans. Corp. 1, start nec sect 6 go ne alg nwl sect 7 for 1617 ft th 3008 ft se at ra to len in 7-12-8	5-24-44	8-14-44	10171	7830-7838	Sd; Mio.	F 340; $\frac{5}{32}$"	35	D; refl seis.	1 well reserve 180,000-200,000 bbls.
		SOUTH LOUISIANA—New Distillate Pay									
Cameron	Pecan Lake	Superior of Calif.'s Miami Corp B-1, 330 s&e of nwc 29-14s-3w	.....	8-30-44	12000	8193-8198	Mio. sd; Mio.	F 21; $\frac{5}{32}$"	51.9	.....	Relatively unimportant. Fld disc well pb after deepening.
		MICHIGAN—New Oil Pays									
Genesee	Otisville	Clyde Palmer's Davidson 1, ne ne se 6-9n-8e	7-13-44	9-10-44	2502	2493-2502	Traverse li; Devo.	P 66	....	.....	500 ga lacid 2400-2502'.
Missaukee	E. Norwich	Sun's Horner 12, s½ sw se 16-24n-5w	6-16-44	9-19-44	3143	2460-2590	Traverse li; Devo.	F-P 20; 15 wtr.	....	.....	500 gal acid 2460-2590 ft.
		MISSISSIPPI—New Oil Field									
Lincoln	Mallalieu	Calif. Co.'s W. C. Douglas 1, c ne se 10-6n-8e	.....	9- -44	10641	10515-560	Tuscaloosa sd; U. Cre.	F 375; $\frac{5}{32}$"	38	Ant; refl seis.	Appears similar to Brookhaven, 6 mi to nw.
		MISSISSIPPI—New Distillate Field									
Jeff Davis	Gwinville	Sid Richardson's C. E. Berry 1, c se nw 24-9n-15w	.....	9- -44	9967	8120-8132 7855-7880 8075-8105	Tuscaloosa sd; U. Cre. Lwr Eutaw, U. Cre.	F 2 mln; ½" F 65; 7.1 mln.	gas dist.	.....	Shutin. Dual completion. Shutin.
		MISSISSIPPI—Oil Field Extension									
Jasper	Heidelberg	Kingwood Oil Co.'s E. V. Hill 1, 514 fr nl 847 fr wl se ne 4-10n-10w	.....	9- -44	5018	4931-4933	Eutaw sd; U. Cre.	P 170; 7% wtr	....	Ant; seis.	1 mi s extension to eastern prod. area.
		MONTANA—New Gas Fields									
Liberty	E. Utopia	Texas Co.'s Laas 1, nw sw sw 14-33n-4e	.....	9- -44	2610	-2610	Madison li; Miss.	F 5 m.n.	gas	Ant; geol.	On ds test gaged 25 mln gas, wrkg pres 600 lb, shut in pres 1000 lb.
Toole	Kicking Horse	Husky Ref. Co.'s Rankin 1, nw ne se 8-36n-1e	.....	9- -44	2040	-2040	Ellis-Madison li; Jur-Miss.	F 20 mln	gas	Ant; geol.	Ne Kevin-Sunburst fld.
		NEW MEXICO—Oil Field Extension									
Lea	Vacuum	Devonian Oil Co.'s State 1, c se sw 32-17s-34e	6-20-44	9-15-44	4729	4685-4729	San Andres li; Perm.	S 36	37	.....	1⅘ mi w by s of fld; not commercial.
		OHIO—New Oil Field									
Lorain	.....	Glen Harmon's George Woodruff 1, Lot 88, Lagrange twp	.....	9-15-44	2497	2467-2397	Clinton sd; Sil.	F 15	....	.....	.....
		OHIO—New Gas Fields									
Holmes	.....	Ohio Fuel's S. C. Critchfield 1, Sect 28, Ripley twp	.....	9-25-44	3134	3082-3087	Clinton sd; Sil.	F 0.437 mln.	gas	.....	.....
Wayne	.....	Northern Ordance's Mary Martin 1, Sect 3, Green twp	.....	9-20-44	3515	3440-3448	Clinton sd; Sil.	F ½ mln.	gas	.....	*Fair gas well. Rock Press. 1130 lbs.*

Wayne		Northern Ordance's Mary Martin 1, Sect 3, Green twp		9-25-44 9-20-44	3134 3515	3082-3087 3440-3448	Clinton sd; Sil. Clinton sd; Sil.	F 0.437 mln. F ½ mln.	gas gas		Fair gas well. Rock Press. 1130 lbs.

		OHIO—Oil Field Extension									
Ashland	Lake Twp.	Robinson et al's Beulah Snyder 1, nw Sect 17		9- 8-44	2964	2928-2964		F 25			1 mi w extension.
		OHIO—Gas Field Extension									
Guernsey	Wheeling	Oriskany Ohio Fuel Gas Co.'s C. H. Gibson 1, Sect 6, Liberty twp		9-15-44	3545	3539-3545	Oriskany sd. Devo.	F 0.979 mln.	gas		½ mi s extension.
		OKLAHOMA—New Oil Fields									
Creek	Unnamed	C. O. Buckles' Conner 1, sw se ne 17-18n-10e, Kellyville area		9- 3-44	2755	2730-2755	Dutcher sd; Penn.	F 25	29	Str trp; sub.	Small pool, perhaps 80 ac; good recovery likely.
Creek	Unnamed	Nadel & Gussman's Sandlin 1, se se nw 6-14n-8e		9- 2-44	3922	2450-2469	Prue sd; Penn.	P 25	49	Str trp; sub.	Unimportant. May cover 200 acres.
Garvin	E. Pauls Vly.	Ohio Oil Co.'s McKinney 1, sw ne se 18-3n-2e		9-19-44	2892	2866-2892	Burns sd; Penn.	F 227	33.4	Ant fld; seis.	Establishes oil prod on w flk Pauls Valley gas pool. May cover 4 sections with probable reserve 10,000,000 bbl.
Hughes	Unnamed	W. N. Bartlett-Ashalnd O&R Co.'s Smith 1, nw sw ne 27-6n-8e, 4 mi n Spaulding		9- 7-44	3441	2625-2649	Beech sd; Penn.	P 114	39	Ant; sur-sub.	Small; may cover 400 ac. Nearest prod is 3-well pool 1½ mi away.
Okfuskee	Unnamed	Kubat-Phillips' Overall 1, sw sw nw 15-11n-9e, ½ in nw of Okemah		9-20-44	4123	3898-3910	Hunton li; Devo.	F 135; 40 wtr; ¼"	43	Str trp; geol,	Dry in Wilcox. Hunton erratic in section
Okfuskee	N. Padin	Phillips' Fixico 1, se nw nw 10-12n-7e, 1½ mi s of Padin		9-10-44	4557	3726-3772	Cromwell sd; Penn.	P 38; 40 wtr.		Ant; seis.	On edge Cromwell basin; form. is sdy li. not impt.
		OKLAHOMA—New Gas Field									
Lincoln	Unnamed	Anderson-Pritchard's Eikenburg 1, nw nw se 8-14n-6e, 4 mi se Stroud		9-15-44	3250	3204-3250	Prue sd; Penn.	F 7.5 mln.	gas	Sd lens; sub.	Drlg limited to 1 well per 160 ac. No high recovery expected.
		SOUTHWEST TEXAS—New Oil Field									
Duval		Tom Graham's M. I. Richardson 2, 1320 sl 1650 fr wl Richardson lse and GB&CNG sur 3, 660 n of No. 1	6-23-44	7- -44	1784	-1784	Jackson sd; Eoc.	P 18; 15% wtr			Unimportant.
		SOUTH CENTRAL TEXAS—New Oil Pay									
Medina	Chicon Lake	A. A. Murrell's Fee 12		9- -44	950	833- 877	Shell beds; U. Cre.	P 5-10	38	Ant; drlg.	Desirable oil; will lead to considerable drlg. Fld hereto-fore yielded 19-20 grav oil fr Navarro sands at 350-440 ft
		LOWER TEXAS COAST—New Oil Field									
Victoria	S. Inez	Lyons & Prentiss' Keeran Est. 1, 330 fr nw&swl 160-ac lse, Martin de Leon sur, 2000 e Koutny 1	7- 7-44	8-30-44	7020	4754-4758	Vicksburg sd; Olig.	F 111; 4/64"	29	D; flk drlg.	First oil in gas area. 1-well reserve 150,000 bbl.
		LOWER TEXAS COAST—New Distillate Fields									
Goliad		Continental's Victoria Albrecht et al 1, 330 fr sel 3550 fr nel 800-ac lse, Manuel Carriona sur A-308, 3 mi sse Cabeza Crk fld		7- -44	10958	8340-8360	Wilcox sd; Eoc.	F 75; ¼"	58.8		No estimate.
Karnes		Anderson-Pritchard's Mrs. Edmonia Tenberg W-1, 177-ac lse, J. Johnson sur 164, 467 fr se&swl blk 2, Burnell area	7-12-44	9- 2-44	6953	6735-6768	Wilcox sd; Eoc.	F 70; ¼"	cond.		No estimate.
Lavaca	Unnamed	Sterling O&R Co.'s Mary Hoffman et al 1, 600 fr sel 725 fr swl 100-ac lse and D. B. Oakes sur, 12 mi se Yoakum	6-23-44	9-22-44	9003	7716-7750	Wilcox sd; Eoc.	F 50; 3/16"	cond.		May connect with Brushy Creek.
		LOWER TEXAS COAST—New Oil Pay									
Nueces	Riverside	Standolin's George R. Clark 2, 545 s of nl 399 w of el of lot 39 302-ac lse, J. V. L. de Herrera Gr 5896 ene of No. 1 on same lse.	5-26-44	8-29-44	6561	6276-6283	Frio sd; Olig.	F 724; 14 wtr; 7/64	40	Drlg.	First crude oil pay.
		LOWER TEXAS COAST—Oil Field Extensions									
San Patricio	Gregory	Humble's J. F. Green Est. 2, 633 fr el 4251 fr sl T. T. Williamson sur 42, 2 mi se Gregory on 4929-ac lse.		8-24-44	9502	8503-8505	Frio sd; Olig.	F 77; 4/64"	43.9	Drlg.	Adds about 320 acres; 2640 n 30 begin 40 min e of No. 1 Green Est. discovery.
Live Oak	Coquat	Henderson Coquat's Mrs. Idell Custer 1, 660 fr nwl 660 fr swl 100-ac lse, H. Waller sur 4.		9-10-44	8043	7542-7548	Carrizo-Wilcox sd; Eoc.	No gage	cond.		Fair drlg. prospects.
		UPPER TEXAS GULF COAST—New Oil Field									
Harris	Spring	Eltex, Ltd.'s Bender Est. 1, 330 fr wl 283-ac lse, Mary C Bulrice sur A-129.	8-13-44	9-12-44	6249	6239-6249	Cockfield sd; Eoc.	F 128; 1/8"	38.3	D; refl seis.	1-well reserve 160,000-180,000 bbls. ½ mi s Spring
		UPPER TEXAS GULF COAST—New Gas Field									
Ft. Bend	S. Needville	British-American's Hurta 1, 660 fr nwl 467 fr swl 50-ac tr, Robt. Hodge sur A-33.	6-11-44	8-28-44	6849	6025-6032	Sd; M Olig.	F 110.7; 29% wtr; 4/64"	26.6	D; flk dr.	Probably limited area; few wells possible.
		UPPER TEXAS GULF COAST—Distillate Field Extension									
Wharton	Lissie	Edwin Nielsen's Winnie Poole 1, 660 fr ne&sel 2050 fr nwl 114-ac lse, GH&H sur 25.		8-14-44	7204	6444-6448 6602-6606	Yegua sd; Eoc. Yegua sd; Eoc.	F 3 mln; ¼" F 10; 4/64"	55		Not important. 1 mi s Lissie.
		NORTH TEXAS—New Oil Fields									
Clay	Buffalo Spgs.	Continental-Edge Oil's W. D. Crockett 1, 330 out nec sect 3245 TE&L Co. sur.	4-27-44	9- 4-44	6817 Elnb.	6490-6500 6503-6513	Simpson li; Ord.	P 165	41	Ant; geol.	First Simp prod for county. IP below par for this depth. 4½ mi s by w Wynn pool's Miss. wells.
Cooke		Kadane-Griffith Oil's S. B. Hopkins 1, 330 out nwc sect 18 BBB&C Ry. sur A-150.	8-20-44	9-28-44	2982	2973-2982	Conglomerate; Penn.	F 846	39.4	Ant; geol.	Small area on flnk steep Ellen. high that accounts for shallower Ellen. wells in Dangle pool, 1½ mi to ne.
Throck-morton	Ewalt	Panhandle Ref. Co.-Anderson-Pritchard's W. B. Ewalt 1, 1500 fr s&nl 467 fr e&wl sect 2170 TE&L Co. sur	8- 8-44	9-15-44	5034 Miss.	4156-4161	Bend li; Penn.	F 744; 3/8"	40	Ant; geop.	Small area but prod above average for Bend wells in dist. 5½ mi w of 1-well pool.
		NORTH TEXAS—New Oil Pay									
Young		Fleming Oil-Kimbell Copr's M. K. Graham 3, 330 out nwc sect 2912 TE&L Co. sur, offset 4300-ft Marble Falls prod.	10-28-43	9- 5-44	4655	4652-4655	Miss.	P 25; 15 wtr.	40	Ant; geol.	Not important; small potential, 2 prior comp failed to prod fr this zone.
		EAST TEXAS—New Oil Pay									
Wood	Winnsboro	Gulf's Mrs. Willis Hornbuckle 1, 542 fr s&nl 803 fr e&wl 62.9-ac tr, B. Lee sur A-376, 2500 n by w of fld's 7990-ft Bacon li disc.	4-14-44	9-17-44	9141	8210-8240	Gloyd li; L. Cre.	F 72; 1/8"	46.9	Ant; geop-geol.	This deeper pay yielded flwg prod in disc but was excl in pb; will likely result in dual comps hereafter. Fld's 2 wells indicate attractive, profitable area.
		WEST TEXAS—Oil Field Extensions									
Howard	Iatan-E.	L. C. Harrison's D. H. Snyder 1, nw nw nw T&P Ry., sect 20 blk 30 T-1-S.	4-21-44	9- 6-44	3051	2800-3051	San Andres, Perm.	P 45	28		May link 2 flds; Iatan-E. Howard (1⅜ mi to ne) and Snyder (1⅜ mi to se).
Andrews	Union	Union of Calif.-Helmerich & Payne's M. A. Redus 1-B, c sw sw PSL 22 blk A-31.	2-26-44	9-11-44	7415	6930-7415	Clear Fork, Perm.	F 210; ¾"	41	Ant; geol.	1¾ mi sw extension for broad structure. Emphasizes indications Union, Fullerton flds will unite.
		WYOMING—New Oil Pay									
Hot Springs	Gebo	Continental's Gebo 3, sw se sw 23-44n-95w		9- -44	5103	4880-4983	Tennsleep sd; Penn.	F 1309 bbls.	26	Ant; geol.	Fld previously prod in Embar li at 4680-4968 ft.

[1] Character of producing formations abbreviated thus: ch, chalk; dolo, dolomite; li, limestone; sd, sandstone; sh, shale; ser, serppentine; cgl, conglomerate. Ages of formations abbreviated thus: Pleis, Pleistone; Mio, Miocene; Olig, Oligocene; Eoc, Eocene; U. Cre, Upper Cretaceous; L. Cre, Lower Cretaceous; Jur, Jurassic; Tri, Triassic; Perm, Permian; Penn, Pennsylvania; U. Miss, Mississippian; L. Miss, Lower Mississippian; Devo, Devonian; Sil, Silurian; Ord, Ordovician; Cam, Cambrian.

[2] Barrels of oil per day (24 hr. rate), flowing (F), pumping (P), swabbing (Sw), or bailing (B); or million cubic feet of gas daily open flow capacity; size of choke given in inches. [3] Type structure abbreviated as follows: Ant, Anticline; D, Dome; Fld, Fold or Folded; Flt, Fault or Faulted; M, Monocline; N, Nose; SD, Salt Dome; Str, trp, Stratigraphic trap; Syn, Syncline; Ter, Terrace. [4] Method of discovery abbreviated as follows: cd, core drilling; dr. drilling; geol, geology; geop, geophysics; grv, gravity meter; ran dr, random drilling; seis, seismograph; sub, subsurface; geology; sur, surface geology.

New Postwar Uses for Oil Means More Jobs, Boyd Says in Reconversion Talk

The oil industry is one of the few major industries of the country which faces no great physical reconversion problem, but postwar conditions may bring changes in the make-up of the industry, members of the Indiana Independent Petroleum Association were told by William R. Boyd, Jr., chairman of the Petroleum Industry War Council in Indianapolis October 11.

Boyd outlined some of the changes in the situation which will occur after the defeat of Germany, including the shift in emphasis from large quantities of 100-octane aviation gasoline to smaller quantities of 100-plus octane gasoline and the heavier burden on the West Coast refineries accompanied by a diminished demand on the East Coast.

"There is one reconversion problem, however, which, in my opinion, may well engage the careful attention of us all," he said. "That is the problem of mental reconversion; the readjustment of our thinking and retooling of our business methods from war to peace.

"American alertness and American initiative built the petroleum industry in this country to a position far in advance of that of any other nation. We must be prepared to go ahead full throttle as soon as the exigencies of war permit. We must restore at the earliest possible moment balanced production of crude oil from existing fields. Present maximum production is necessary as a war measure, but return of peace will bring with it the necessity of not only revising our rates of production so that the greatest ultimate yield rather than the highest current production will be obtained, but the need to replace our war-depleted reserves by a great exploratory campaign must also be one of our very first objectives."

Through the IIPA Boyd gave assurance to oil-company workers now in the armed forces that their jobs will be waiting for them when they come back, and called upon the industry generally to make this a major matter in its postwar planning.

"It is not a question of capital and labor, or employment versus unemployment," he said. "It is simply a case of opening to them again the places we have been saving for them in our hearts and our homes and our daily lives. In this reunion with our own, let the petroleum industry yield first place to none."

New products, new outlets, new uses and new concepts of service, Boyd predicted, will provide more jobs and more opportunities in the industry and also will provide even greater peacetime usefulness for petroleum.

September Exploratory Rate Fair

• CONTINUED FROM PAGE 53

results have been obtained in finding and extending sources of oil than of gas and gas-condensate. Discoveries of oil fields and pays are up only 12.7 percent above last year, and oil area extensions are up only 6 percent. In contrast, discoveries of gas and distillate fields and pays have been almost double those of last year, and extensions are more than double. Many of these gas and distillate producers are disappointments in that they were drilled primarily in search of oil.

Among productive tests that have yielded oil, relatively more favorable results have been obtained in finding new fields or establishing new pay horizons than in extending existing fields. This probably is significant, suggesting that under the war time strain, the industry already has used up a relatively large part of its possibilities for stepping out from known fields to add productive acreage, and that it is being forced to depend more upon entirely new areas in developing new reserves. Extensions of oil fields, as recorded in these monthly summaries, have totaled only 106 this year against 100 last year, a 6 percent increase; while oil field discoveries are up 13.7 percent and new oil pay discoveries are up 10.5 percent. It should be noted that finding of new pays, like extensions, has been less effective than opening of virgin areas.

Southeastern States in Limelight

In line with the emphasis now being placed upon developing entirely new sources, discoveries and extensions in Alabama and Mississippi were prominent in the record for September. Mississippi gained 2 new fields, one yielding oil and the other condensate, and the Heidelberg field in that state was extended a mile south, while Gilbertown field, Alabama, was stretched out four miles westward by two outposts. These exploratory producers contribute toward justifying high hopes generated last year and this year for the whole coastal region between the Mississippi River and the Atlantic seaboard. (The Oil Weekly, May 22, page 29, presented comprehensive data on the region's fields and possibilities.) Mississippi now has 9 oil fields, a distillate area, and a gas field, and Alabama has an oil field covering a comparatively large area, although Florida has not advanced beyond the stage of having a 1-well oil field.

Comparatively good results were reported in September in the Rocky Mountain states. These included 2 oil field extensions in Colorado, 2 new gas fields in Montana, and establishing of a new oil pay zone in the Gebo field, Wyoming.

Less favorable was the development in California, where the urgent need for new oil sources was fulfilled only to the extent of finding 2 apparently small fields.

A fair month was experienced in the Middle West. Illinois gained a small oil field and new oil pay zones in 2 fields, while of probable greater importance were substantial extensions to 4 oil fields, adding considerable new productive acreage. Indiana scored 1 new oil field and Kentucky 2 oil fields and 3 new oil zones for existing fields. Michigan's record was the opening of new oil pays in 2 fields, and Ohio gained 1 oil field and 2 gas fields and extensions to 1 oil field and 1 gas field.

In the upper Mid-Continent there was a good run of success. Oklahoma gained 6 small to medium fields and a mediocre gas field, and Kansas reported 4 apparently small oil fields and 2 gas fields.

Texas High Up

Discoveries in the Southwest were mainly in Texas, as usual, but Louisiana and New Mexico also were represented. North Louisiana gained a gas field and South Louisiana 1 oil field and 1 distillate pay. Most of the districts of Texas showed success in development. North Texas operators found 3 small oil fields and a new pay in 1 oil field, and in East Texas the Winnsboro field of Wood County became productive from the Gloyd lime. In West Texas an Andrews County productive outpost promised to connect the Union and Fullerton fields, and a similar intervening well in Howard County probably foreshadowed linking of the Snyder and Iatan fields. The upper Texas Gulf Coast gained 1 oil field, 1 oil pay, and a distillate field extension, and the lower Gulf Coast showed variety in results, including 1 oil field, 3 distillate fields, 1 oil pay, 1 oil field extension, and 1 distillate field extension. Southwest Texas added 1 oil field, and in South Central Texas a new pay was found in the Chicon Lake oil field, Medina County.

Oil Mining Project in Kansas Making Progress

The first oil-mining project west of the Mississippi river is reported making good progress in northeastern Kansas. Spotted in the abandoned Black pool in township 19s-24e, the mine is four miles north of Lacygne, site in 1860 of the first oil well drilled west of the Mississippi. The project is sponsored by Frank C. Thomas of St. Louis, Mo.

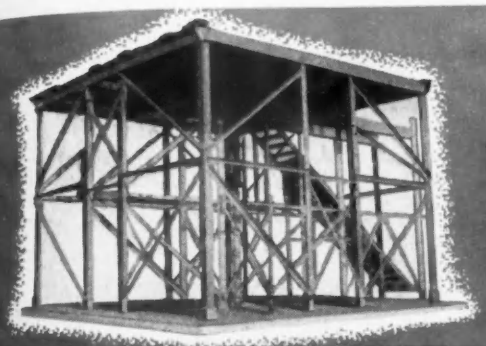
Mine shaft has been cribbed to a depth of 230 feet where from two 16-foot cribbed working rooms lateral drilling is in progress. Operator used an oil field cable tool machine in sinking the shaft, drilling cable being used to hoist buckets from the shaft and the sand line was used to trip the buckets on the dump.

Marking a seven-foot square pattern on the surface, the operator drilled five holes with cable tools through the sand body at approximately 230 feet, four holes at each corner with the fifth in the center of the square. As each hole was drilled it was filled with sand and when actual digging of the shaft began the center hole was shot first and then the corner holes, using regular oil field gelatinized nitro. The shaft was cribbed to shut off water and prevent cave-ins.

Top of the oil sand was logged at approximately 200 feet and the shaft was sunk through the sand to 230 feet so a section of approximately 29 feet of sand remains at the bottom of the shaft and the work rooms have been built in the section.

A lateral drilling machine is being assembled and holes will be drilled from 700 to 800 feet through the sand formation, using diamond core heads and fishtail bits. The sand will be shot and the oil will flow by gravity to the bottom of the shaft, where it will be pumped to the surface.

Equipment



PRODUCTION SUBSTRUCTURES

Designed for use on producing wells located in marshes, or locations subject to flooding. Furnished in two parts to support the derrick and the pumping unit.

PUMPING UNIT SUBSTRUCTURES

(Right) Designed and built to eliminate vibration, and provide a rugged structural steel frame within capacity requirements. Heights 6' to 16'. Weight 3,362-lbs. to 5,290-lbs.

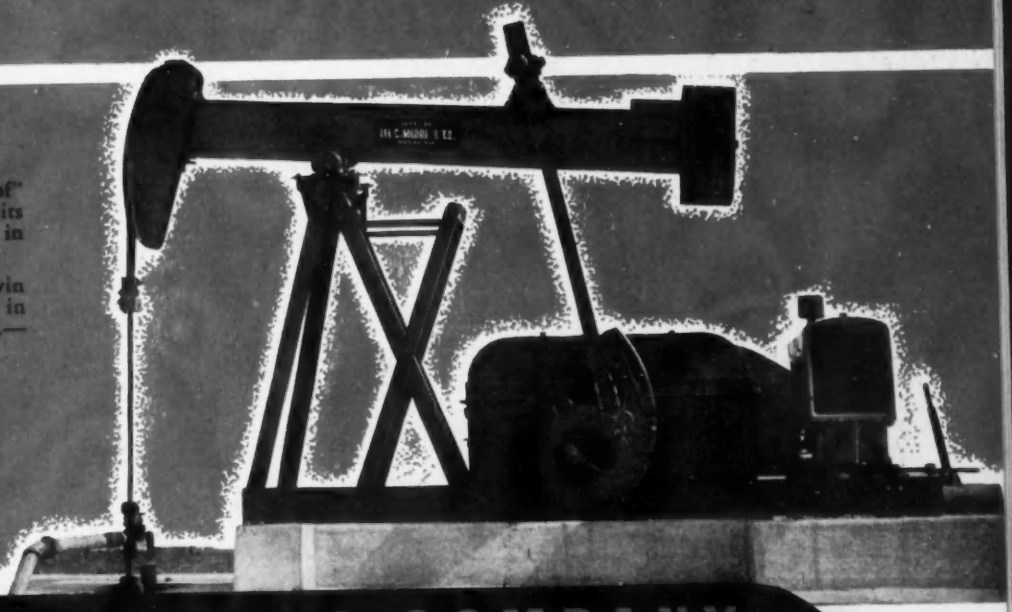
ROD LINE SWING

Moore Stroke Posts are available in two types: Knuckle Post Type with the stroke post swinging *above* the two pillow block type bearings, which are mounted on the concrete pier. Pendulum Type Stroke Post that swings *below* the block type bearings, which are mounted at the top of the frame. (As illustrated)

MOORE PUMPING UNITS

Redhead Units have a "foolproof" chain tightening device that permits accurate adjustment of the chain, in the field.

Moore Double Reduction Twin Crank Pumping Units are available in FIVE popular sizes—5 h.p.—9 h.p.—14 h.p.—21 h.p. and 28 h.p.



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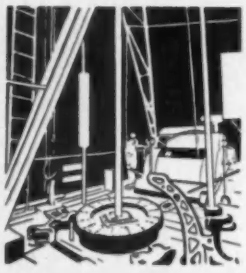
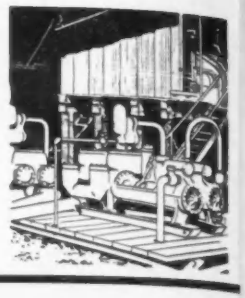


OPERATING HINTS *For Drilling Crews*



Sectional Roof Provides Mud Pump Protection

An inexpensive and easily erected roof for the mud pump installation so that maintenance and repair can be done in comfort during rainy weather or intense sunlight can be made of 2x4-inch lumber and corrugated steel roofing and mounted on the pumps themselves to avoid construction of additional foundations.

SLUSH PUMP PROTECTION

The roof members, made up in panels of a width sufficient to cover the pumps, abut along the centerline, with the sheets of one side projecting over the other to form a lap joint which turns all but the hardest driven rain.

The supports are 2-inch line pipe, the horizontal members directly below the roof being made long enough so that the flattened and turned up ends will hug the edge timbers closely, and may, if desired, be bolted thereto. Two tees are connected into each horizontal section, with the drop leg terminating in a short nipple. These sections are so spaced that they may be joined, by flange unions or collars, to the remainder of the leg which, in turn, may either be screwed into properly placed collars carried on the pump frame, or may be slipped into 2½-inch pipe sockets, these latter being equipped with ears or flanges so they may be attached to the pump at head, valve cover, or other convenient points.

If the roof unit is found to be subject to excessive vibration due to pump motion or wind effect, the running of heavy wire cross guys between tees and anchor points affords the desired steadying effect, without impairing working space or pump visibility.

$5.00 is paid for each illustrated acceptable contribution. Mail to The Editor, THE OIL WEEKLY, P. O. Box 2608, Houston 1, Texas

Tool Box Vise Base Widens Working Range

Where a steel tool box is part of the regular rig equipment, advantage may be taken of the pipe or channel reinforcing band welded around the box and a vise table mounted at one corner.

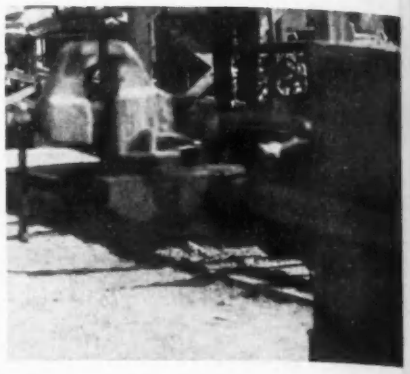
HAND TOOL EQUIPMENT

This table or base consists, on one rig, of a section of 6-inch channel welded with the flat surface uppermost, and carrying holes through which fit the bolts in the vise base.

This stand, anchored firmly in place by the weight of tool box and contents, is at a height convenient for most hand work, and, being on the corner, affords free access to the vise jaws over an arc of 270 degrees.

Normally, the vise is considered as a permanent mount on the corner of the box, and is transported in place between wells. When the rig is to be stacked, however, it is but a moment's job to remove the base bolts and store the unit within the box, safe from pilferage and out of the weather.

The work in the vise may be supported at the farther end by means of a hook, bent up from sucker rod or similar scrap, and of such a length that when one end is hooked over the box edge the other will align with the vise jaws.



Carried on the lateral reinforcement of the steel box, this vise is well anchored and handy.

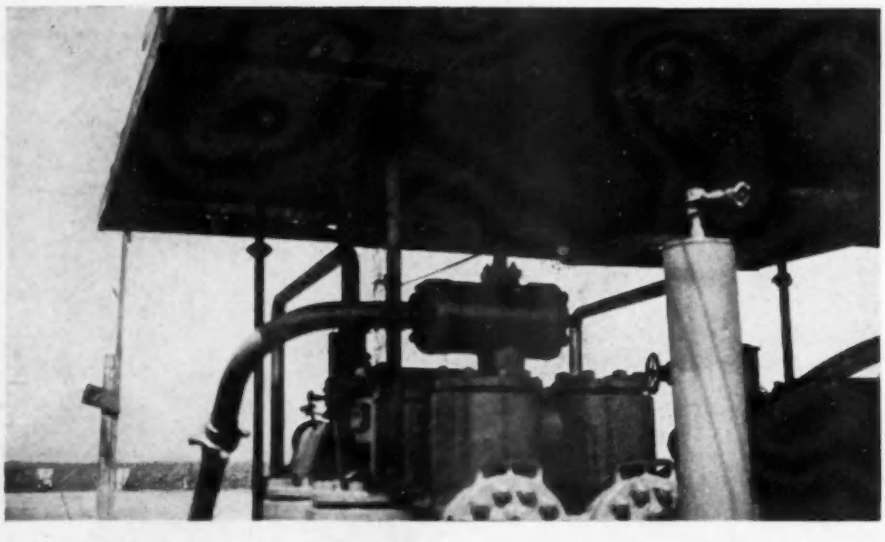
Self-Clamping Support Prevents Pipe Shifting

Split pipe sleeve, forced against line by pressure on sloping legs, insures against vibration shifts.

A light and easily placed pipe support may be made up by the welder in a short time by cutting a section from a short nipple of scrap pipe just large enough to accommodate the diameter of the line to be supported. Near each end of this horizontal section are welded two 2-inch pipe legs, extending out at an angle of some 45 degrees from the cradle section, and tied together at the bottom by a section of scrap tank angle, another piece of 2-inch pipe, or even prevented from further spreading with a tie of sand line between the bases of the legs.

RIGGING-UP SUPPORT

If the cradle be made of light pipe, merely leaving the bases of the legs free



Socketed standards, nested in permanent mounts on pump body, carry special light frame and timber and corrugated roofing to improve working conditions around mud pump installation.

The "Rolling Dog" principle of MISSION SLIPS protects your Drill pipe ...speeds up round trips

Mission One-Piece Extra-Long Rotary Slips

THE ROLLING DOGS protect your drill pipe by giving a gradual, cushioning grip instead of cutting or bottlenecking.

SMALL, NON-CONTINUOUS TEETH . . . further protect your pipe by preventing undue stress concentration.

FASTER ROUND TRIPS: The action of the rolling dogs gives a positive grip and instant release, factors which make for ***faster, safer handling of pipe.***

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You apply RECTORSEAL directly from the container with brush or swab. No mixing necessary. Use it on all threaded, coupled, or gasket connections. RECTORSEAL is insoluble in all petroleum products. The perfect seal for oil, gas, steam, mud and water line connections . . . also casing and tubing collars.

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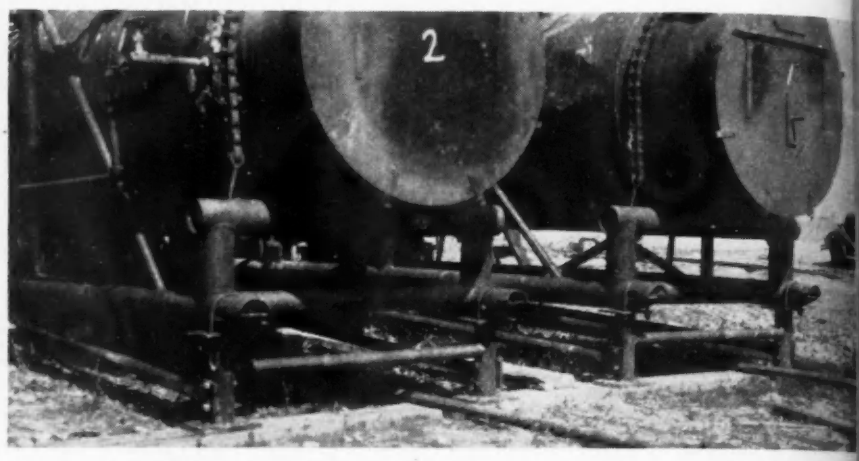
RECTORSEAL
THE POSITIVE LEAK PREVENTER

so the weight of the pipe being carried will tend to cramp or close in the open support will prevent the pipe from shifting, and thus will reduce vibration.

Greater thickness of the cradle metal permits threading and the insertion of setscrews or bolts with locknuts to be tightened against the line and its motion thus snubbed.

Such a support, as contrasted to one completely enclosing the pipe, permits quick setup or disassembly, and does not require threading a long joint through the support.

Prefabricated Subbase Improves Boiler Setup



Made up of drill stem, boiler plate and angle through braces, this spacer foundation takes skid load and provides even and equalized support under smoke-box end of boiler battery.

BOILER MOUNTING

Portable subbases for boilers equipped with individual skid-type units can be used which eliminates necessity of pouring any type of concrete piers except, perhaps, a narrow rail under certain soil conditions upon which the legs of the subbases are installed. Most situations can be met by laying a timber mat, narrow in dry weather or more extended when the going is soft.

This subbase has four 4-inch pipe risers with a heavy boiler plate square at the lower end and one at the top which will carry the weight of the boiler skid. Each pair of risers is joined with a horizontal pipe welded securely, and the diagonally opposite risers of each pair of risers are joined with a long brace which is bolted on. Substantial U-bolts are used at each end of the boiler skid base for anchoring to the subbase through holes drilled in the riser top plates.

The boilers are anchored to the smoke-box transverse support by means of a length of discarded drilling chain, equipped with heavy steel hook at one end to attach to pipe, while the other hook also carries a turnbuckle for adjustment of the tension in the chain. Such an anchorage, while not cramping expansion shifts along the boiler axis, prevent lateral movement.

Be sure to check the . . .

TRADING POST SECTION

on page 85 of this issue

"USED EQUIPMENT FOR SALE"

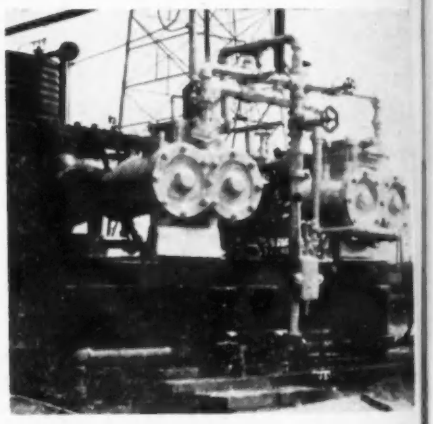
"EQUIPMENT WANTED TO BUY"

"HELP WANTED"

"POSITIONS WANTED"

and others that you may find of interest.

Unitized Pump Mount Speeds Maintenance



Wide channels, welded to normal pump skid members, raises unit to provide desired working clearance.

FEED PUMP UNITIZATION

Setting twin boiler feed pumps can be done so that a minimum amount of connection work is required when rigging up, or tearing down after the well is completed. These pumps are mounted on a sub-frame of structural steel, which in turn is placed on wide web I beams, turned up at each end to form skids.

Holes are cut in the web of the lower beams for inserting operating lines, pro-

CHAINS

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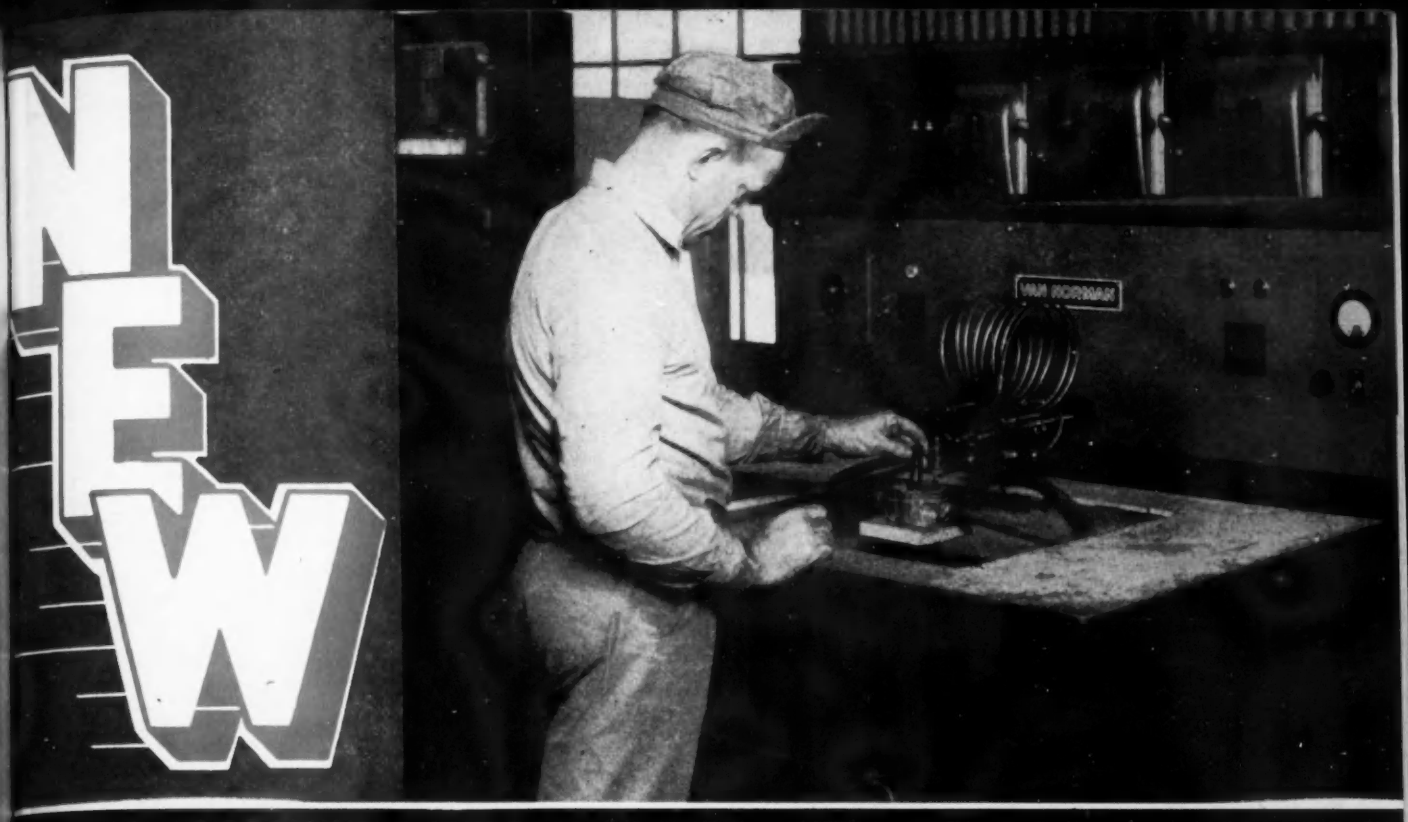

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The requirements of war manufacturing made for new developments in Induction Heating and proved its superiority, especially for localizing heat, and hardening a *specific* section of a part to the exact hardness wanted and to a pre-desired depth. This is done with practically no change in the structure of the untreated portion of the part. Induction heating does the job in seconds rather than minutes . . . it eliminates possible distortion and warping often encountered in other methods of heat treating . . . and leaves the work free from undesirable scale.

Heating time and quenching are controlled accurately and automatically.

Induction heating is ideal for *localized hardening* of metal parts such as gears, cam shafts, bearing races, cutting tools, machine shafts, and similar important steel products.

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UNIFORM HARDENING: Piece after piece is turned out with ideal physical characteristics as to heat penetration and depth of hardness.

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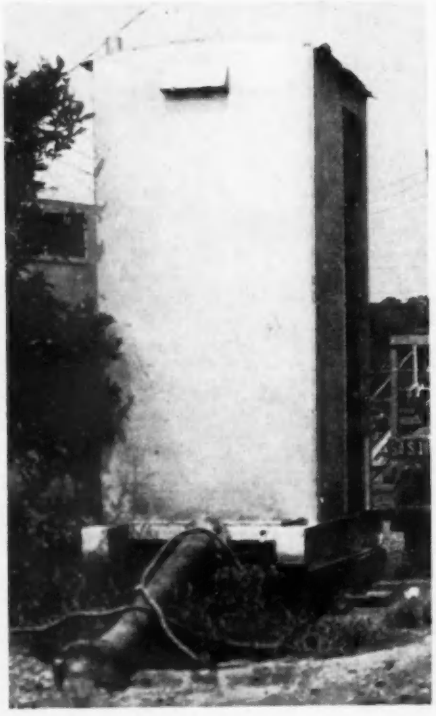
tected by the length of the skid members against damage by rough transportation. Each end of the inserted lines is finished exactly alike so that the service piping—steam and water—can be connected to either side of the setting. Swedge nipples and necessary fittings are furnished for plugging the open ends, sometimes used for bleeding, or obtaining water or steam for auxiliary purposes.

Connecting-up is facilitated by using ground joint or flange unions, half of which remain with the pump assembly, the other half being shipped with the service piping.

Steel Flush-Type Toilet Aids Lease Sanitation



With flexible water and waste connections, this toilet ties in to any sewer or septic tank.

WELL SITE AUXILIARIES

Provision of a toilet at the rig site, even when the drilling is adjacent to improved property where other facilities are available, speeds work and cuts down absenteeism. One contractor utilizes an all-steel building, fitted with stool and flush tank, to which has been attached a section of flexible hose for tying in to the nearest drain, or for connection to a septic tank system if sewers are not available.

Flushing water is provided from the rig cold-water lines, through a pressure-reducing valve and a section of hose so that the installation may be made to tie-in with sewage layout rather than require accurate pipe fitting.

The unit is skid-mounted, with a blind flange which is placed over the outlet end of the sewer connection while the unit is being transferred between locations.

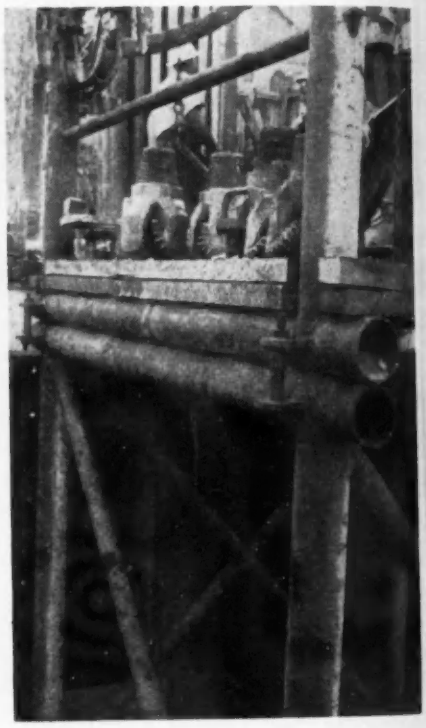
Where weather conditions require, the installation of a small heater—gas-fired or using rig steam, as dictated by the setup—adds only a second small flexible connection to the fittings demanded by the unit.

Elevated Tool Rack Increases Working Area

SPARE PARTS STORAGE

To provide additional floor space for deep drilling rigs, yet not encumber moving operations with unwieldy structures, one major company utilizes a modified all-welded, two-story rack which may be assembled and securely tied together with only four bolts. Principal transverse and upright members are of 4-inch salvaged pipe, braced with 2-inch material. Base members of the upper section rest upon the upper members of the lower rack and by means of steel ears welded to each of these members, are bolted together.

Short lengths of 1-inch pipe serve as spacers between corresponding pairs of ears as they are placed one over the other in the assembled position, this serving to prevent bending of the ears, yet permitting the bolts to be tightened



Mounted atop the frame and offsetting the derrick floor, this rack speeds tool and bit selection.

as much as desired. Planking in the bottom of the upper rack brings that unit level with the derrick floor and permits easy skidding of heavy tools, bits, subs and similar equipment which should not clutter the derrick floor proper, but must nevertheless be readily available. Ordinarily such items take up valuable space by being loosely stacked up in one corner of the rig.

Fulfilling still another use, the upper rack is also open to the outer side, and, being spotted usually on the roadway side of the derrick, provides a handy loading platform.

REED ROCK BITS

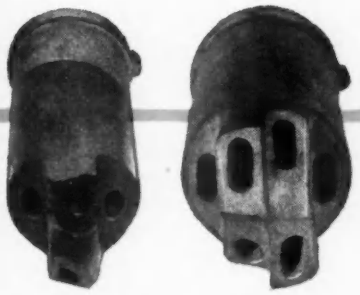
for FASTER—STRAIGHTER—FULL GAUGE HOLE

SPEED WITH LESS WEIGHT

Reed Rock Bits are designed to chip, twist and tear the formation. This action is made more effective through the use of lighter drilling weights and the effective cleaning action of the cutter teeth.

The Reed inter-changeable Mud Nozzle eliminates the necessity of ordering new bits when it is desired to use a different jetting action than that provided in the bits available on the rig. Various sizes of jets may be had to accommodate any circulation requirements and the change can be made on the rig in a few minutes. Where desirable the nozzle may be left out entirely without impairing the strength or safety of the bit.

The construction of Reed Rock Bits provides a strong, safe foundation for the cutter assembly and all cutter teeth and gauge bevels are hard faced for longer life, full gauge hole and more hole per bit.



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SIX JET NOZZLE

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Pipe Line Review

Natural Gas Line from Texas To California Is Planned

A $60,000,000 pipe line to bring natural gas from Texas oilfields to Southern California — the largest project of its kind ever contemplated—is planned as a joint venture of three gas corporations, officials of Southern California Gas Company have disclosed.

The 1000-mile long line would bring from 200,000,000 to 300,000,000 feet of gas into Southern California daily and is hoped to be completed by the winter of 1945-46. Companies planning the joint undertaking include Southern California Gas Company, Southern Counties Gas Company of Pacific Lighting Corporation, and Pacific Gas & Electric Corporation.

The terminus of the line will be near Los Angeles. Increasing the supply in Southern California will relieve the need for using gas from San Joaquin oil fields which then will be shunted to Central and Northern California.

Shell Pipe Line Official Named to API Committee

Shell Pipe Line Corporation, Houston, announces that Hallam Hans Anderson, vice president and general manager, has been appointed national vice-chairman of the American Petroleum Institute's committee on the standardization of oil-country tubular goods. He was also named a member of the institute's engineers' sub-committee.

Anderson was active in API work 15 years ago, when he worked on standardization of derricks, internal-combustion engines and other oilfield equipment.

He is a graduate of the University of Southern California and holds a B.S. and an M.A. degree in electrical engineering.

Seven Miles of New Mexico Gathering System Complete

Artesia Pipe Line Company, subsidiary of New Mexico Asphalt & Refining Company, which operates a 6000-barrel capacity refinery at Artesia, New Mexico, has completed the first leg of a projected 30-mile, 4-inch crude gathering system that will serve five small pools in Eddy County.

The completed unit involves seven miles, extending from the Artesia field to the Turkey Track pool, and work will proceed on extension to the Benson, Barber, Getty and Russell areas. The crude will be routed from Artesia field to the Artesia refinery through New Mexico Pipe Line Company's carrier to avoid duplication of lines.

West Edmond-Oklahoma City Line Is Authorized

The War Production Board has authorized Standish Pipe Line Company, (Phillips Petroleum Company), and Sohio Petroleum Company to lay 21 miles of 8-inch crude oil line from the West Edmond, Oklahoma, pool to Oklahoma City, using second hand materials. Approval for the line came two days after a disastrous fire destroyed the pump station of the Cimarron Valley Pipe Line Company at Edmond. This is the only trunk line out of the West Edmond pool and the fire caused the shut down of 200 producers and affected the movement of about 30,000 barrels a day which was being moved to the Champlin refinery at Enid, Oklahoma.

The new line will have a capacity of between 35,000 and 40,000 barrels a day. Right-of-way has been surveyed and work will get started as soon as contract is awarded. The line is expected to be in operation 30 days after construction begins. The additional line has been recommended by officials of District 2 PAW and had been under consideration by WPB for several weeks.

West Edmond Trunk Line Outlet Destroyed by Fire

The Banks pump station of Cimarron Valley Pipe Line Company at Edmond, Oklahoma, only trunk line outlet for the West Edmond pool, was destroyed by fire Oct. 15. Booster pumps and engines were destroyed but the adjacent tanks escaped damage.

The fire caused a temporary shutdown of 200 producing wells and all drilling wells in the field with a consequent loss of daily crude runs which will be reflected in the state's weekly total. The field was producing about 30,000 barrels of oil daily. Temporary repairs were effected and about 25 percent of field runs were being moved by the early part of the week with full pumping capacity on an emergency basis expected by the end of the week. Permanent replacement of the station will require about three weeks.

The line is owned by Champlin Refining Company of Enid, and the crude moves to the company's refinery there.

Cement-Chickasha Area Has Another Wild Gasser

Another wild gasser in the Cement-Chickasha area of Oklahoma, was reported when Oklahoma Natural Gas Company's Chandler Unit 1, CNE SE 27-5n-8w, on the west edge of the Chickasha gas field, caught fire after it had been opened up and while the crew was preparing to go into the hole. The well, at total depth of 6123 feet with casing perforated in the Pooler zone at 5025-5100 feet, when tested showed for 4,412,000 feet of gas with 1860 pounds pressure. Tex Thornton of Amarillo, Texas, was summoned to put out the blazing well so that it could be killed and retested.

Work on the directional well to kill the wild gasser in the Cement pool, Caddo County, which got out of control several weeks ago, continues.

Gas Line Contract Let

Contract has been let by Cities Service Gas Company for 50 miles of 16-inch gas line which will loop with the company's present system from Shidler, Osage County, Oklahoma, to Caney, Montgomery County, Kansas. Sharman and Allen pipe line construction firm, was awarded the contract.

Employe Benefit Plan Is Adopted by Gulf

Gulf Oil Corporation has announced an annuities and benefits plan for employes which provides retirement incomes for the present 28,000 and future participants. J. H. Russell, vice president, Houston, said the plan has been made effecitve as of January 1, 1944. Credit for service prior to that date is also allowed.

Purpose of the plan is two-fold: It assures to employes a retirement income as an incentive to further service and it is a voluntary reward for long-term and faithful work, applicable to all on equal terms. Entire cost of the plan is borne by the company with funds paid into an irrevocable trust.

All regular employes are participants including those now absent on military leave. Service men and women will receive full credit for service during their authorized leaves.

No minimum number of years of creditable service is required for regular retirement of men and women at the age of 65. For earlier retirement on a reduced annuity, employes must have attained an age of 55 and must have completed at least 20 years of creditable service.

In lieu of the annuity otherwise payable on his account after retirement, an annuitant may elect a reduced annuity of equivalent actuarial value with the provision that after his death payment shall be made to his beneficiary.

Map Offers Data on Fields From Texas to Alabama

Oil, gas and condensate fields are shown in contrasting colors on a map of East Texas, South Arkansas, North Louisiana, Mississippi and West Alabama which is being offered by Mid-Continent Map Company, 1651 Colquitt, Box 6277, Houston 6.

The map also gives pertintent data concerning the fields shown, including the county in which they are located, discovery date and API gravity of production. The name, age and depth of producing formations are given, along with size and ownership of oil and gas pipe lines traversing the area.

The map may be obtained in size 42 by 70 inches, price $12.50, and 28 by 46 inches, price $7.50.

Turkey Reportedly Plans Baku Oil to Supply Plants

Oil from Baku, transhipped from Poti, at the western terminus of the Baku pipe line, will supply two petroleum refineries to be constructed and operated by the Turkish government.

The plants, which will be built at a reported cost of $6,000,000, are expected to be located at Black Sea rail terminals.

Gas Line Planned

Lone Star Gas Company and Rogers Lacy of Longview, Texas, are dismantling their recycling and gasoline plant in the Willow Springs area of Craig County, for reinstallation in the Carthage area of Panola County.

Lone Star plans to build a gas line from the Carthage sector to the company's pump station at Trinidad where it will tie into one of the company's main carriers.

High Production and Refinery Runs of Crude Provide Good Supply of Products

Current output of crude oil and refined products increased in the week ended October 14, with favorable effect on stocks, latest weekly statistics of the industry indicated.

Crude production of 4,726,000 barrels daily was 35,000 a day higher than in the previous week and within about 35,000 of the all-time peak in the final week of September. It was 314,000 a day or 7.1 percent higher than production in the comparable week last year. Crude runs to stills averaged 4,589,000 barrels daily, up 83,000 from the week before, and 398,000 daily or 9.5 percent above runs in the week ended October 16 last year. Crude oil stocks were increased 107,000 barrels to 222,500,000 in the week ended October 7, but still were only about 2,000,000 barrels above the 22-year low of several weeks ago. The crude inventory is about 11,000,000 barrels or 4.7 percent less than that held at this time last year.

The gasoline situation was maintained favorably, as production was increased to 2,063,000 barrels daily, up 27,000 from the previous week, and only 7000 barrels a day were withdrawn from storage. Production was 16.4 percent higher than in the like week last year, and the stocks of 78,506,000 barrels held October 14 were 10,855,000 barrels or 16 percent above those of 67,651,000 barrels on hand October 16 last year.

Similar results were shown for gasoil and distillate fuel oil. Production averaged 771,000 barrels daily, up 99,000 from the week before and 139,000 daily or 22 percent above output in the corresponding week last year. Stocks were enlarged at the rate of 179,000 barrels daily and rose to 47,335,000 barrels, an amount 5,588,000 barrels or 13.4 percent greater than that of 41,747,000 barrels reported for the corresponding date last year.

Residual fuel oil production of 1,261,000 barrels daily was 22,000 a day more than in the previous week and 168,000 daily or 15.4 percent more than in the comparable week a year ago. Stocks were drawn upon, nevertheless, by 40,000 barrels daily and declined to 64,365,000 barrels. That quantity was 1,324,000 barrels or 2 percent less than the 65,689,000 barrels reported for October 16 last year.

Director for Streamlined PAW Tulsa District Named

Mark Patton, director of the PAW natural gas and gasoline division for District 2, Tulsa, has been made director of the Tulsa district in line with a policy of streamlining operations in the district.

Patton is empowered to deal with all matters pertaining to the industry instead of allocating to specialists any question that arises in the district. Personnel in the Tulsa office is being reduced from 18 to 10. In District 2 personnel has been reduced from a maximum of 148 to 87, with a proportionate reduction in office space. The new policy was announced by W. W. Vandeveer, Chicago, director in charge of District 2, during a visit to the Tulsa office.

Denies Plant Removal

A report that Denver Producing & Refining Company planned to move its shut-down skimming plant in Gainsville, Texas, to Edmond, Oklahoma, to process oil from its wells in West Edmond, has been denied by R. G. Rapp, president. Early this year PAW denied permission to move the plant on the grounds that District 2 had ample refining capacity to handle available production.

Kansas Hearing

Kansas State Corporation Commission has set October 27 as the date for considering market demands and to fix the state and pool allowables for the month of November. Hearing is scheduled at 10 a.m. in Wichita.

☆

W. C. KIMBALL, chief scout for Phillips Petroleum Company in West Texas-New Mexico district with headquarters at Midland, Texas, has been assigned to the land department as title man in the same district, succeeding Amos Alexander, resigned.

Trends of Operations and Changes in Stocks

Figures on crude stocks are from Bureau of Mines weekly reports; all others from American Petroleum Institute weekly reports, which are estimates on Bureau of Mines basis.
(All figures in thousands of barrels—add 000)

HIGHS AND LOWS OF RECENT YEARS

ITEM	Crude Oil Prod. Barrels Daily	Crude Oil Prod. Week Ended	Runs to Stills Barrels Daily	Runs to Stills Week Ended	Crude Stocks Barrels	Crude Stocks Week Ended	Gasoline Stocks Barrels	Gasoline Stocks Week Ended	Gasoil and Distillate Stocks Barrels	Gasoil and Distillate Stocks Week Ended	Residual Fuel Oil Stocks Barrels	Residual Fuel Oil Stocks Week Ended
Highs:												
1941	4,337	11-22	4,120	10-18	266,187	3-29	99,727	3-29	[1]54,983	11-15	102,448	1- 4
1942	4,337	2- 7	3,961	1- 3	263,208	3-28	[1]109,281	3-14	47,861	11-14	95,857	1- 3
1943	4,436	11-13	4,331	12- 4	245,752	5-29	94,159	3-20	47,187	11-27	72,881	1- 2
1944	[1]4,762	9-30	[1]4,775	9-30	240,992	1- 1	89,162	4- 1	47,335	10-14	64,644	10- 7
Lows:												
1939	[3]1,601	8-26	3,125	2-18	[2]229,127	10-12	71,152	10- 7	20,722	4-15	105,397	4- 8
1941	3,364	1-11	3,490	1-18	240,399	11-15	79,923	10- 4	28,382	4-12	90,914	7-12
1942	3,297	7- 4	3,393	5-23	231,896	12-12	75,934	12- 5	29,240	4-25	72,962	12-26
1943	3,821	1- 9	3,579	3-13	232,191	1- 9	68,182	10-16	30,732	4- 3	57,596	12-25
1944	4,357	1- 1	4,228	2-12	[4]220,623	9- 9	76,302	1- 1	30,232	4-29	49,737	3-18

TRENDS OF 1943 AND 1944

Trends in Week Ended:	Crude Oil Production Daily	Crude Oil Runs to Stills Daily	Crude Oil Stocks Week End	Gasoline Production Weekly	Gasoline Stocks Week End	Gasoil and Distillate Production Weekly	Gasoil and Distillate Stocks Week End	Residual Fuel Production Weekly	Residual Fuel Stocks Week End
1943:									
January 2	3,871	3,734	233,938	10,957	82,420	4,285	42,913	7,683	72,881
January 30	3,826	3,698	233,863	10,339	88,830	3,888	37,057	7,452	70,763
February 27	3,873	3,709	235,217	10,566	93,157	4,230	32,939	7,839	70,140
March 27	3,896	3,742	239,126	10,231	94,079	3,541	30,980	8,018	67,938
April 24	3,913	3,737	242,035	10,583	91,001	3,954	31,142	8,168	67,455
May 29	3,970	3,679	245,752	10,656	83,937	3,798	32,274	7,672	67,682
June 26	3,955	4,015	242,657	11,092	79,589	3,876	34,044	8,126	67,960
July 31	4,133	3,788	238,420	11,127	74,977	3,765	36,363	8,478	66,877
August 28	4,196	4,227	236,170	12,420	72,525	4,351	37,928	8,732	67,250
September 25	3,344	4,156	233,013	12,206	70,024	4,608	40,328	8,560	66,659
October 30	4,383	4,176	247,219	12,813	69,297	4,642	44,591	7,968	63,833
November 27	4,414	4,261	239,761	12,638	69,980	4,379	46,187	8,633	62,143
December 25	4,363	4,185	241,310	12,597	74,024	4,457	43,791	8,689	57,596
1944:									
January 1	4,357	4,453	240,992	13,192	76,302	4,575	42,310	9,141	57,330
January 29	4,409	4,359	240,251	13,427	81,085	4,054	37,266	8,889	52,857
February 26	4,423	4,377	237,137	13,183	85,248	4,558	33,766	8,952	51,387
March 25	4,385	4,443	236,285	13,362	87,287	4,979	31,319	9,013	51,669
April 1	4,383	4,435	234,667	13,824	89,162	4,450	30,530	8,367	51,326
April 29	4,431	4,300	235,342	13,126	88,462	4,284	30,236	8,398	49,985
May 27	4,514	4,532	234,423	13,502	86,468	4,702	32,035	8,568	49,812
July 1	4,587	4,638	228,860	14,052	83,559	4,496	35,360	8,872	52,235
July 29	4,608	4,627	225,112	14,115	82,665	4,833	38,135	8,900	56,280
August 26	4,667	4,698	222,931	14,112	80,740	4,566	41,453	8,680	59,839
September 30	[1]4,762	[1]4,775	222,393	14,494	78,028	4,622	45,329	9,292	64,226
October 7	4,691	4,506	222,500	14,252	78,554	4,706	46,078	8,676	64,644
October 14, 1944	4,726	4,589	.....	14,442	78 506	5,398	47,335	8,827	64,365
October 16, 1943	4,412	4,191	[5]233,471	12,410	67,651	4,425	41,747	7,649	65,689
Change:									
In week	+35	+83	+107	+190	—48	+692	+1,257	+151	—279
In year	+314	+398	—10,971	+2,032	+10,855	+973	+5,588	+1,178	—1,324
In year	+7.1%	+9.5%	—4.7%	+16.4%	+16.0%	+22.0%	+13.4%	+15.4%	—2.0%

[1] All time peak. [2] Lowest between January, 1922 and July 1, 1944. [3] Lowest since October, 1922, due to shutdown of six Mid-Continent states. [4] Lowest since December, 1921. [5] Stocks, October 9, 1943.

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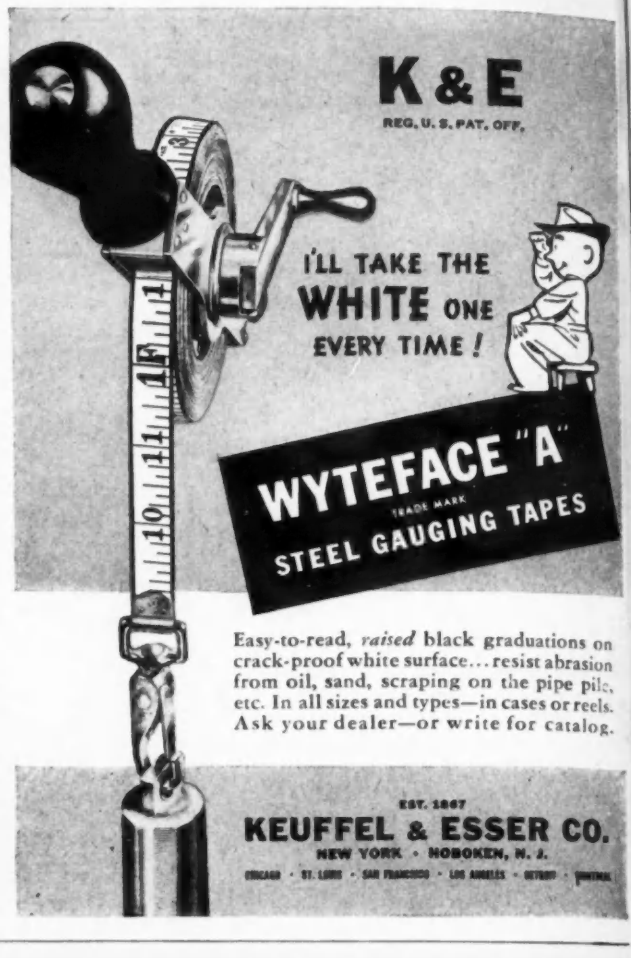

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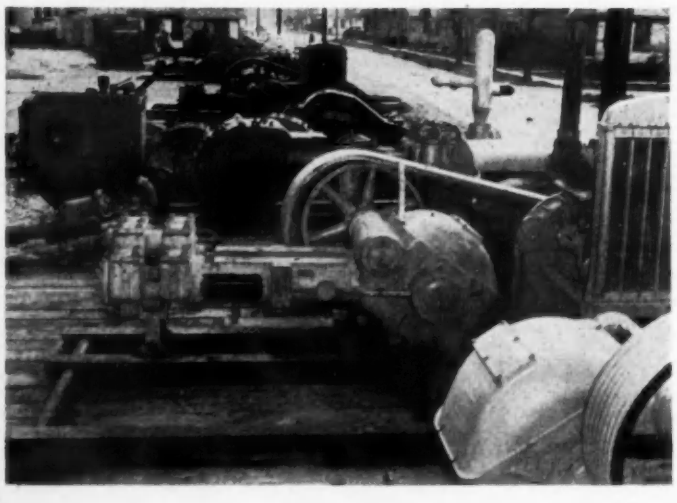

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Some of the many items available for rent are shown in the accompanying picture, ready for immediate use.

International Developments

Spain's Minerals Declared Property of Government

Spain has proclaimed all subsurface minerals the property of the state, and their exploitation subject to concession contracts with the government on a "production fee" basis.

The law also provides for expropriation of privately operated mineral industries, should the public interest demand such action. The decree allows the government to ban private mineral enterprises in certain non-defined areas in the interest of the national economy or national defense.

The law is reported to have been passed in anticipation of considerable postwar interest in the petroleum possibilities of northern Spain, on the part of British and American companies which were planning to carry on preliminary explorations when the civil war broke out.

Progress Reported on Wildcat in Nova Scotia

Lion Oil Refining Company's Mary 1, its second wildcat in central Nova Scotia, was reported at 3457 feet on October 9, with some 250 feet of crooked hole above that depth.

Continental Petroleums Ltd. has engaged Dr. Basil Zavoico of New York, consulting geologist, to check the producing possibilities of its two uncompleted wells on the Gaspe Peninsula, and to report on the further possibilities of its 85,000 acre block of leases there. Operations have been halted at CPL 1 to ream and case off water at 2137 feet. CPL 2 was drilling with cable tool core barrel at 2440 on October 7, after logging a third saturation from 22 feet above that depth, and bailing light oil with paraffin.

Texas Company Increases Venezuelan Concessions

The Ministry of Fomento, government of Venezuela, has announced that the Texas Petroleum Company of Venezuela has been granted concession contracts covering eight small parcels of land in the state of Monagas, totaling 11,634 hectares. Titles to most of the parcels refer to national reserve properties. The concessions are subject to initial exploitation taxes of 15 Bolivares per hectare.

Test at Western Tip of Cuba Reaches 2147 Feet

Seaboard-Standard Oil Company of Cuba was drilling at 2147 feet on October 10 in its Guanal 1, 15 miles southeast of Pinar Del Rio near the western tip of Cuba. The test is exploring a thick section of middle and upper Tertiary strata that underlies the coastal plain.

In Haiti, Atlantic Refining Company is drilling at undisclosed depth at the second Maissade location, 30 miles northeast of Port au Prince, on a joint-interest venture with Haitian Petroleum Company. The first hole was abandoned a few weeks ago as dry. The same area is being explored in the Comendador operation, just across the border in the Dominican Republic, by Seaboard, with Standard Oil Company (New Jersey) and the Bishop interests participating. This well had been put down to 5735 feet October 6.

Farther east, near Azua, in the Dominican Republic, the same group reported 4772 feet of hole made in its Las Hormigas test, which was shut down for several weeks in August and September. This site is 4 miles west of the Maleno well, which for a brief period yielded a heavy flow of gas and distillate when it was completed in 1938. In the next five years five dry holes were drilled in the surrounding area.

Report of Wildcat Failures In Southern Chile Denied

The Corporation de Fomento de la Produccion de Chile has issued a denial of recently published information (THE OIL WEEKLY, October 9) which quoted a supposedly authoritative source to the effect that eight dry holes have been drilled recently in the Magallanes Territory of extreme southern Chile, at locations based on seismograph surveys carried out there under the direction of the government agency.

A Fomento spokesman declared no holes have yet been started in the area under the present program of exploration and development. Previous wildcat wells drilled in the Punt Arenas area were not based on seismograph findings, according to Fomento, and no wells have been drilled there at all within the past six years.

The corporation spokesman said geological and geophysical mapping of the area, on which the United Geophysical Company has been working for 18 months, is nearing completion and shows favorable possibilities, for which reason the first test wells on selected structures will be started as soon as required materials are secured.

Chilean law, it is explained, prohibits private companies from undertaking either exploration or exploitation work in Magallanes Territory. "For this reason, and in view of the favorable results of geological and geophysical work, the Chilean government through its instrumentality (Corp. de Fomento) will spend as much money as necessary to fully test the area," it was said.

British Issue Catalog

The Council of British Manufacturers of Petroleum Equipment, organized in 1943, has ready for publication a catalog covering more than 500 items of oilfield and refinery equipment sold by British firms and manufactured by 180 companies.

The council was organized chiefly for the purpose of securing the "benevolent interest" of British oil companies in the purchase of British-made equipment and the reduction of sales of American equipment to British operators. The latter group is cooperating with the council in supplying specifications, information as to improvements in equipment and postwar equipment needs for expansion of operations throughout the world.

Tells of Well Southwest Of Comodoro Rivadavia

Yacimientos Petroliferos Fiscales, the Argentine government company, has revealed additional details on the discovery southwest of Comodoro Rivadavia field, mentioned in the August 28 issue of THE OIL WEEKLY. The report was published in Boletin de Informaciones Petroleras.

The government hopes that considerable production acreage will be developed around the discovery well, and also that this same pay may be proved as a new horizon in Comodoro Rivadavia field proper.

Well's Location

The wildcat 0-12, located some 81 kilometers (50 miles) south southwest of well No. 2 in the Comodoro Rivadavia field, discovered in December 1907, is about 16 kilometers (10 miles) southwest of the village of Caleta Olivia. It was completed June 26 with an initial potential, through natural flow, of 160 cubic meters (1006 barrels) per day of light petroleum (31-gravity) and a bottom hole pressure of 160 atmospheres (2352 pounds per square inch). Production is from 1601-1604 meters (5251-5261 feet) below the surface. Drilling began on March 26 of the past year and continued till May 5 when drilling samples showed impregnations of light petroleum at 1238-1257 meters (4060-4123 feet). Wells previously drilled within a radius of 76 kilometers (47 miles) had not shown the slightest trace of hydrocarbons. The well went to 1613 meters (5291 feet) revealing 10 sands with shows of oil within an interval of 60 meters (197 feet). The deepest was tested and produced so large a yield that the well was completed and shut in, leaving production awaiting storage and transportation facilities. The other pays are to be tested in the next company well.

Three Wildcats

The discovery opens the possibility of other important oil deposits in an extension of the south flank of the great sedimentary basin in the Gulf of St. George, and offers important new data on the region. Drilling of the well was based on geological surface studies and on logs of wells drilled by Y.P.F. and other companies. These tests were failures, showed basalt intrusions, unfavorable structural conditions and complete absence of shows. It is believed that the wells were not drilled deep enough to find the new pay. The majority of the wells encountered the Glauconitico horizon, recognized as a guide, below 500 meters (1640 feet) below sea level, in a structure that has not yet been proved productive with the exception of the small area of Campamento Sur.

The discovery well was the most southerly of three wildcats scheduled to test the stratigraphic-sedimentary-petroleum conditions of the area. Some uncertainty was felt as to the correlation of strata because of the extremely gentle dips and lack of continuous guide sands in the Patagonian formation, which thins out in this region.

☆

M. L. CUNNINGHAM, formerly drilling engineer for Gulf Oil Corporation in the Permian Basin, West Texas, is now with Sunshine Iron Works, Odessa, Texas. Cunningham is engaged in development and distribution of mud screens.

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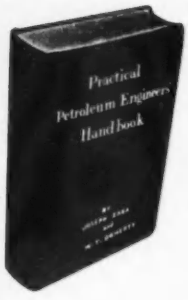

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This handbook was compiled and published for the purpose of saving the time of operators, engineers, superintendents, foremen and others.

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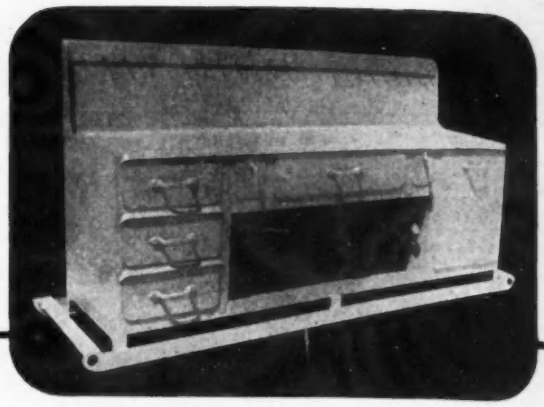

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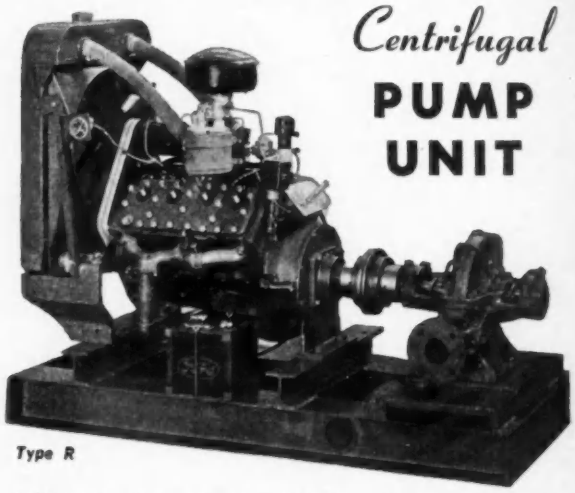

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New World's Record for Depth Set By Standard of California Well

Drilling ahead below 15,368 feet late last week, Standard Oil Company of California's KCL 20-13, on the west edge of South Coles Levee field, Kern County, now holds the record as the world's deepest well. At this depth, it exceeds the record set earlier in the year by Phillips Petroleum Company in Pecos County, West Texas, by 89 feet. The next closest record in California was 15,004 feet, made near Wasco, in 1938.

KCL 20-13 is in an area that produces from the Stevens Zone sands (Miocene age) at approximately 9000 feet. Below the Stevens, geologists are seeking other zones such as the Vedder sand which is productive at much shallower depths along the east side of the San Joaquin Valley. If the well is productive in its lower measures Company officials say the discovery would be one of the most important exploration developments in recent California oil history.

The well is ¾-mile west of the productive limits of the South Coles Levee field, 332.77 feet south and 329.44 feet east of the west quarter corner of 5-31s-25e M.D.B.&M. Ground level elevation is 488 feet.

KCL 20-13 was spudded in on July 31, 1943. Almost 14 months later, Sept. 29, 1944, the then existing California record depth was equalled and passed.

A 15½-inch hole was drilled to 1188; a 10⅝-inch hole was carried to 10,999; from the latter point a 5⅞-inch hole has been drilled. Three and one-half inch drill pipe is being used at the present time.

At no time has the hole been more than 3 degrees off vertical.

Two strings of casing are cemented in the hole—11¾-inch is cemented at 1188; and a 7-inch string is cemented at 10,999.

Ordinary Equipment

No special equipment is being used; as a matter of fact, heavier equipment has been utilized for drilling shallower holes in the San Joaquin Valley. Part of equipment used includes a 136-foot steel derrick, 360-ton crown block, 18x8x20-inch mud pump and a 16¼x7¾x20-inch mud pump, 11x11-inch twin engine, as well as a complete shut off gate and blow out preventer.

The mud weight has been increased from the range of 78 to 80 pounds in the shallower depths to 90-93 pounds at the present bottom.

The crew makes a roundtrip, when changing bits, in a little less than 8 hours. Approximately 3½ hours are required to come out of the hole and about 4 hours to go back in with the more than 165 90-foot stands of drill pipe.

Up to October 12 548 bits have been used. It is estimated that the total weight of the drill pipe and accessory equipment, which is supported by the derrick, approximates 250,000 pounds. Following shows progress, by weeks to October 10 in drilling below 14,000 feet.

Hole's Progress

Since June 29 when the well stood at 14,073, the drill had reached (October 10) a 15,159-foot depth. The best week was that preceding August 1 when 140 feet of hole was made and the poorest week was that ending August 22 with only 14 feet.

No serious fishing jobs have been encountered. Al Tietze, general superintendent for Standard's Northern California District, has praised the crew as "a good one, well qualified to carry on drilling operations at any depth."

Fresno County: Amerada Petroleum Corporation's Cal. Lands 76-15 in the Lanare area of Fresno County, Section 15-17-18, was completed October 6 flowing 180 barrels per day, 31-gravity, .3 cut, through a 16/64-inch bean with 300 pounds flow pressure and 82,000 feet of gas. Depth is 8097 feet with top of the McClure placed at 5738 feet, top of the Temblor at 5917 feet, top of Kreyenhagen at 7684 feet, and top of the Eocene sand at 8053 feet.

Kern County: Ohio Oil Company has completed gun-perforation work in its K.C.L. A-1 in Section 31-31-26. Gun-perforations were made from 4659-52, 4647-39, 4627-25 and on tests flowed 4,000,000 feet of gas rate through a 22/64-inch bean with 1200/1380 pounds, 6,000,000 feet rate through a 32/64-inch bean with 900/1365 pounds and 7,400,000 feet through a 48/64-inch bean with 525/1355 pounds.

Tide Water Associated Oil Company has completed its second well in the Gosford area of Kern County, Section 22-30-26. This well, K.C.L. 62-22, was completed October 12, flowing at a 1200-barrel rate per day, 28.2-gravity, 24 cut through a 1-inch bean with 200/675 pounds. Depth is 7942 feet with 5½-inch shut-off at 7840 feet. "N" point was placed at 7332 feet and top of the first oil sand at 7861 feet.

Reserve Oil & Gas Company's 33-7, Section 33-11-19, Tejon Ranch area, was unable to get any fluid coming into the

Wells Completed in United States in Week Ended October 21, 1944

Data preliminary and subject to revision. Revised and more complete data on all completions shown in monthly summary of drilling, published in second issue of each month. More detailed data on wildcats published in third issue of each month.

State or District	FIELD COMPLETIONS: New Wells *Oil	Gas	†Input	Dry	Total	Old Wells Deepened	WILDCAT COMPLETIONS *Oil	Gas	Dry	Total	ALL COMPLETIONS: This Week	Last Week	Cumulative: This Year	Last Year
Alabama	....	....	....	....	....	....	....	....	....	....	....	....	31	2
Arizona	....	....	....	....	....	....	....	....	....	....	....	....	6	4
Arkansas	6	1	....	....	7	....	....	....	2	2	9	5	189	212
California	38	1	....	....	39	....	2	....	5	7	46	42	1,678	1,154
Colorado	....	....	....	....	....	....	....	....	....	....	....	....	24	22
Florida	....	....	....	....	....	....	....	....	1	1	1	1	3	3
Georgia	....	....	....	....	....	....	....	....	....	....	....	....	6	2
Illinois	23	....	....	14	37	3	1	....	4	5	45	44	1,575	1,457
Indiana	4	5	....	1	10	....	....	....	4	4	14	8	272	219
Iowa	....	....	....	....	....	....	....	....	....	....	....	....	2	3
Kansas	16	....	....	....	16	....	2	....	17	19	35	35	1,403	1,386
Kentucky	10	....	....	7	17	....	....	....	3	3	20	17	632	323
Louisiana	11	2	....	3	16	1	2	1	4	7	24	12	619	519
North Louisiana	5	2	....	1	8	1	....	1	3	4	13	4	216	240
South Louisiana	6	....	....	2	8	....	2	....	1	3	11	8	403	279
Michigan	4	....	....	4	8	....	....	....	6	6	14	23	548	478
Mississippi	....	....	....	....	....	....	....	....	....	....	....	....	155	78
Missouri	....	....	....	....	....	....	....	....	....	....	....	....	36	22
Montana	....	....	....	....	....	....	....	....	1	1	1	....	275	175
Nebraska	....	....	....	....	....	....	....	....	1	1	1	1	10	36
New Mexico	7	....	....	....	7	....	....	....	....	....	7	13	326	219
New York	15	....	10	....	25	....	....	....	....	....	25	25	1,011	1,005
Ohio	12	2	....	4	18	....	....	....	....	....	18	21	730	669
Oklahoma	26	3	1	....	30	1	2	1	4	7	38	44	1,507	1,153
Pennsylvania	28	6	15	1	50	....	....	....	....	....	50	54	2,371	2,047
Tennessee	....	....	....	....	....	....	....	....	....	....	....	....	9	6
Texas	72	5	....	11	88	4	3	....	13	16	108	111	4,905	3,391
E.Tex.Bor. Co.'s	....	....	....	....	....	....	....	....	1	1	1	....	27	16
E. Texas Field	....	....	....	....	....	....	....	....	....	....	....	....	3	5
Rest of E. Texas	2	....	....	....	2	....	....	....	1	1	3	9	232	190
North Texas	14	....	....	6	20	2	1	....	4	5	27	21	1,135	838
W. Central Tex.	....	....	....	....	....	....	....	....	....	....	....	7	329	307
West Texas	28	....	....	2	30	1	....	....	2	2	33	24	1,293	750
Tex. Panhandle	7	2	....	1	10	....	....	....	....	....	10	7	199	159
G. Coast, Upper	10	1	....	....	11	....	2	....	1	3	14	14	479	260
G. Coast, Lower	9	2	....	1	12	1	....	....	2	2	15	15	761	515
Southwest Texas	2	....	....	1	3	....	....	....	1	1	4	12	362	301
S. Central Tex.	....	....	....	....	....	....	....	....	1	1	1	2	85	50
Utah	....	....	....	....	....	....	....	....	....	....	....	....	1	....
West Virginia	3	19	....	....	22	....	....	....	....	....	22	38	767	546
Wyoming	....	....	....	....	....	....	....	....	1	1	1	....	138	101
Total U. S.	275	44	26	45	390	9	12	2	66	80	479	494	19,229	15,232

* Includes distillate wells. † Includes salt water disposal wells.

hole after swabbing for several days. Due to the large amount of Baroid used to bring the mud up to 95 pounds it is probable that the oil zone was mudded off. The well was then gun-perforated with ½-inch holes and is now swabbing again showing oil and some gas. The well cored some very good looking oil sand and should make a producer.

Los Angeles County: Barnsdall Oil Company has re-gun perforated the oil zone in its Sunny Hills 2, Coyote Hills area, Section 22-3-10, at intervals from 6002-6365 feet and is placing it on the pump.

Santa Barbara County: Richfield Oil Corporation has discovered a small producer with the completion of its Los Flores 1 well in the Los Alamos area of Santa Barbara County, Section 10-8-33. The well was completed on the pump October 10, making 89 barrels per day, 22.9-gravity with 18 cut. Depth is 7267 feet with the shut off at 6299 feet. The well is currently pumping 25 barrels per day net with 52 percent cut.

☆

DR. KENNETH EILERTS with the petroleum and natural gas division, United States Bureau of Mines, discussed the measurement of properties of the fluid from gas condensate wells with portable equipment before the Mid-Continent Section of the AIME at the Mayo Hotel, Tulsa, October 10.

R. P. LEHMAN, district geologist for Phillips Petroleum Company at Shawnee, Oklahoma, addressed Shawnee Geological Society on the subject: "Erratic Masses in the Sulphur (Oklahoma) Area."

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Kansas

First Production Being Opened in Stanton County

Stanolind Oil & Gas Company is opening what appears to be the first production for Stanton County in southwest Kansas as its Col-Mac 1, center of 32-30s-39w, after treatment with 5000 gallons of acid, tested an estimated 60,000,000 feet of gas daily through perforations at 2560-98 feet. The wildcat is 6 miles west of the Hugoton gas pool. Hole was carried to 2725 feet and plugged back for a test of various formations from 2408 feet to present depth. Four zones higher up the hole showed gas varying from 120,000 to 1,500,000 feet daily.

Stafford County: Phillips Petroleum Company set oil string for a test of Vivian 1, NE NE SE 12-23s-12w, in the Arbuckle zone at 3679-87 feet where a good oil show was logged. The zone was topped at 3679 feet. Shows were also reported in the Viola from 3590 to 3615 feet. The wildcat is 1½ miles south of the Richardson pool.

Sumner County: Six miles southwest of the Wellington pool, The Texas Company's Cramer 1, SW SE NE 8-32s-2w, was drilling below 3980 feet after logging oil shows at 3890 to 3960 feet. Bay Petroleum Company et al's Bennett 1, NE NE SW 23-33s-3w, wildcat 8 miles northeast of the Caldwell pool, was drilling below 4450 feet.

Comanche County: A 6000-foot Arbuckle lime test is projected on a large block between Coldwater and Wilmore by M. H. Watts and Jeff T. Boucher of Tulsa. Derrick is up and water pits are being dug with the contract awarded to Harbor Drilling Company. United Carbon Company is said to be supporting the test.

Sheridan County: Continental Oil Company's Bouts 3, NW SE SW 2-6s-27w, has been given a temporary potential of 430 barrels of oil daily from the Lansing. With 6-inch casing set at 3865 feet, total depth, test was made through perforations at 3734-65 feet and the well swabbed 180 barrels of oil and some water in 4 hours. Casing was ripped at 3616-24 feet and in 6 hours swabbed 50 barrels of oil. Testing continues.

Missouri

The Tarkio pool of Atchison County added another producer when Cities Service Company's Watkins 6, SW SE SW 32-65n-39w, filled up with oil after being shot in the Bartlesville. The zone was topped at 1378 feet and casing set at 1376 feet. The same operator staked Craigmile 2, NW NW SW 32-65n-39w, offset to Craigmile 1, recent completion in the Bartlesville.

Platte County: Francis et al's Fee 1, NE NW 35-51n-34w, in the Parksville community city limits, set 6¼-inch pipe at 262 feet and was cleaning out.

Nebraska

Amerada Petroleum Corporation has moved another seismograph crew into Dawes County. The original crew which worked in the county for some months has been called in and the new crew is re-checking previous work.

Oklahoma

Fourteen West Edmond Wells Completed in Week

With 14 producers completed during the week, West Edmond topped the 200 mark while two extensions gave the producing area 11½ miles north and south and 3¼ miles at its widest. Most important was completion of Magnolia Petroleum Company's Talbot 1, CNW NW 28-13n-4w which gave the pool slightly more than a mile extension south. The first big gasser in the field, Cities Service Oil Company's Gaffney 1, CSE SE 29-15n-4w, Logan County, producing from the Bartlesville sand, is shut in for a market. The well originally tested 25,000,000 feet a day of wet gas and showed a little water. Pinched in to 6,500,000 feet daily, water trouble cleared up. Magnolia staked Talbot 2, CNE NW 28-13n-4w, south of its extension well, and Gulf Oil Corporation is rigging up at Flynn 1, CSW SW 21-13n-4w, north of Talbot 1.

Denver Producing & Refining Company's Collett 1, NW NW 14-13n-4w, missed the Bois D'Arc section of the Hunton and plans to drill to the Wilcox. Base of Pennsylvanian was logged at 6670 feet and the well is fishing for drill pipe at 6786 feet. F. G. and W. J. Fox skidded derrick from O'Brien 1, NE SE 12-14n-5w in Canadian County, to start a new hole. This is the first hole lost in the field. Same operators tested Spivey 1, NW NW 31-14n-4w in the Bartlesville zone at 6855-72 feet, the well flowing 200 barrels of oil and 500,000 feet of gas daily in 24 hours while cleaning out. Twelve wells are testing and 97 are drilling or rigging up.

West Moore: Three shots in the Wilcox in Mid-Continent Petroleum Corporation's Mullins 2, NE NW SW 29-10n-3w, Cleveland County, failed to get production. With total depth at 8873 feet and casing set at 8738 feet, Wilcox was topped at 8811 feet. Hunton top was 7950 feet. The test apparently defines the limits of Wilcox production to the northwest. The hole is being plugged back for a test of the Hunton and possibly the Bartlesville. In the South Moore area, Mid-Continent's Tubbs 2, NE NW SW 29-10n-3w, was drilling below 7790 feet, and Turk 1, SW SW NE 29, was drilling below 8650 and reportedly checking slightly lower with field wells.

Tulsa County: Northeast of Skiatook, S. M. Evans et al's Switzer 1, SE NE NW 13-23n-12e, got a good gas show in a break in the Oswego lime. Showing was estimated at approximately 100,000 feet a day. The wildcat checks about 12 feet higher on the Oswego with Burgess sand producers in the general area. A cable tool operation, the well was drilling below 880 feet, where the gas show was reported and plans to set 8-inch casing after drilling through the Prue.

Stephens County: West of Marlow, The Texas Company seems to have a discovery at Bateman 1, SW NW NE 21-2n-8w, which flowed 100 barrels of oil daily after swabbing down. Drilled to 6320 feet, it was plugged back to 6120 feet. The well which flowed oil and gas on drill stem test at 4960-94 feet, is located about ¾-mile from the company's Cooper 1, SW SW SW 16-2n-8w, a gas-distillate discovery completed in June for 9,000,000 feet of gas daily through perforations at 4743-85 feet.

McClain County: Water trouble still besets The Carter Oil Company's Johnson 1, CSW SE 30-8n-2w, west of Noble and new deep Wilcox and discovery. Several cement and squeeze jobs during the past two weeks failed to get a water shut-off. Latest test resulted in flow of 56 barrels of oil, five percent water, in one hour. Well was shut in for another squeeze job. Total depth is 8222 feet.

Caddo County: Amerada Petroleum Corporation's No-Ho-Co 1, SW SE SE 2-5n-10w, deepest test hole in the state

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and in the Cement pool, has been abandoned. The well reached 9793 feet and backed up to 7403 feet but failed to show. Its Tom Little Chief 2, NEC 3-5n-10w, drilled to 9190 feet and plugged back to 3473 feet tested dry and has been abandoned.

Pottawatomie County: Good oil and gas show was reported at Cities Service Oil Company's Harbour 1, NE NE NW 13-9n-2e, wildcat southeast of Tecumseh. Drilled to 5798 feet in Wilcox, it was plugged back and tested through perforations at 4914-25 feet in the Earlsboro, swabbing 130 barrels of fluid, 50 percent water plus 60,000 feet of gas in 24 hours.

Carter County: In the Graham pool, Continental Oil Co. has hit in the deep Hunton lime section opening a new pay zone for this shallow field. After acidizing in the Hunton at 5410-50 feet the Fowler 1, NW SE SW 31-2s-2w, flowed 270 barrels of oil in three hours with an estimated 10,000,000 feet of gas and was then shut in for tanks. The well was first drilled to 8249 feet and plugged back with 7-inch set at 7132 feet and the Viola zone tested through perforations at 7022-32 feet and 6894-6901 feet where it swabbed 50 barrels of oil in 24 hours. It was then plugged back and tested at 5669-5705 feet recovering about 4,000,000 feet of gas after which the 7-inch pipe was cut off and pulled at 5485 feet.

New Mexico

State's First Producer From Clear Fork Is Flowing

Gulf Oil Corporation's Drinkard 1, 2¼ miles east of the Penrose field, Lea County, and first Clear Fork producer for New Mexico, flowed pipe line oil by heads from perforations at 6430-60 feet in the lower section of the gas and oil-gas pay, topped at 6290 feet. Acid treatment will be made before perforating higher. This prospect was drilled through the pay to 6508 feet, then landed pipe 2 feet off bottom.

Humble Oil & Refining Company's Leonard-Federal 1, pending Ellenburger strike for southeastern Lea County, was testing effectiveness of cement used in landing 5½-inch at 11,964 feet, or 4 feet off bottom. Before perforating for completion, about 150 feet of effective pay was logged in drilling to water. The company's Keinath-Federal 1, wildcat near the east border of Lea County, was drilling dry lime at 8715 feet. Continental Oil Company et al's Skaggs 2-B-23, projected Ellenburger test between the Monument and Skaggs fields, was drilling shaley-lime at 10,270 feet in Simpson, topped at 9775 feet.

The Texas Company's Bobb 1, 2 miles northwest of the Tonto one-well pool, Lea County, was drilling with hole full of water at 3625 feet, having missed the Tonto pay.

SHAPLEIGH G. GRAY, district geologist for Louisiana and Mississippi with Tide Water Associated Oil Company for seven years, has resigned to open offices in the Esperson Building, Houston, as consulting geologist and engineer. Gray has devoted most of his time to the geology of Louisiana and Mississippi for 18 years, having been district geologist for The Texas Company at Shreveport for 11 years before joining Tide Water.

West Texas

Test Passes Up Possible Producing Zones in Ector

The Silurian was included in the prospective oil producing zones passed up by the Shell Oil Company and Cities Service Oil Company's T. P. Land Trust 1, 4 miles northeast of the Wheeler-Ellenburger field, in proceeding to fulfill lease obligation for a 11,000-foot test, or water in the Ellenburger, Ector County.

Drill-stem test at 8800-47 feet in Silurian yielded gas to surface in 6 minutes with the flow attaining maximum rating of 1,584,000 feet daily. The fluid recovery included 90 feet of mud, 4970 feet of 31.8-gravity oil and 1730 feet of salt water. Previously indicated production was from Lower Permian and the Devonian. The test was drilling dry chert-lime at 9960 feet. The Texas Company's T. P. Land Trust 1-B and Cowden 1, both deep tests for Ector County, were drilling at 5181 feet and 3846 feet, respectively.

Andrews County: Sun Oil Company's Martin 1, 2 miles north by west of the West Andrews pool and a scheduled Ellenburger test, was making test of San Andres saturation at 4381 feet to satisfy contributing companies.

Champlin Refining Company's University 1-B, 3½ miles west of the north end of the West Andrews field, eliminated additional prospective producing zones in testing water from perforations at 7930-8015 feet, 7750-8530 feet and 6710-6810 feet in the order listed.

Stanolind Oil & Gas Company's University 1-D, 1¼ miles southeast, was drilling lime at 8670 feet on Ellenburger objective with commercial production assured from the Clear Fork and Devonian.

Dawson County: Richmond Drilling Company's Nelson 1, 2½ miles north by west of the Welch pool, was making swabbing test at 4965 feet with 2000 feet of oil in hole.

Upton County: Humble Oil & Refining Company's Parrott 1, which passed up favorable oil showings in Clear Fork at 7650-75 feet, was trying to land protection string of 7⅝-inch casing while bottomed in shale at 7750 feet. It is scheduled to drill at 11,000 feet, or water in the Ellenburger.

Winkler County: Sun Oil Company's Wheeler 1, on the southwest edge of the Wheeler-Ellenburger 6-well field, recovered 1210 feet of gas-cut rotary fluid when tester was used at 8273-8447 feet in Devonian, topped at 8348 feet, or 8 feet low to the offset. The Devonian has showed production possibilities in earlier field tests.

Crane County: Gulf Oil Corporation's McKnight 6-E, projected Ellenburger wildcat on the northwest flank of the McKnight area and 2½ miles from nearest production, recovered 550 feet of gas-cut drilling fluid when tester was used in McKee, or Upper Simpson, at 6696-6830 feet. In the Crossett pool, The Texas Company's Hobbs 2-B, ¼ mile northwest of production, entered the Devonian at 5355 feet with elevation of 2379 feet, and confirmed production in using tester at 5386 feet. Production test was under way after drilling plugs from 7-inch at 5300 feet.

Pecos County: Phillips Petroleum Company's Ada Price 1, formerly the record depth test of the world, was drilling by junk in sidetracked hole at 10,500 feet, having plugged back from 15,279 feet to set whipstock at 10,480 feet. Humble Oil & Refining Company's State National Bank (El Paso) 1, which depleted oil flow at 5445-63 feet after indicating a new discovery, and was drilling limey-shale at 7120 feet.

Wildcats: Humble Oil & Refining Company's Jackson 1, Lamb County, eliminated the deepest of several promising zones in testing sulphur water from perforations at 6575-90 and 6605-30 feet in liner, having plugged back from granite at 7191 feet. Woodley Petroleum Company's Bird 1, 7½ miles northwest, was drilling dry lime at 5870 feet. Northern Ordnance, Inc., has plugged back and set pipe on 2 tests.

North Texas

Flowing Production Gained By Jack County Wildcats

Flowing production was developed by 2 deep wildcats in Jack County, and a prolific Canyon strike has been recorded in Wilbarger County. First production from the Viola lime for the state is indicated by a Montague County prospect.

Wilbarger County: Fain-McGaha et al's Martin 1, SE SE NW H&TC Ry. 5, Block 11, 3 miles west by north of the Fargo multi-pay field, confirmed favorable drill-stem test made in drilling to 4836 feet by gauging 105 barrels of 41-gravity oil on 10-hour natural test through 20/64-inch tubing choke from perforations at 4750-4810 feet.

Jack County: Hanlon & Buchanan, Inc.'s Matlock 1, southwest corner of the A. H. Latimer Survey and on the southeast edge of the East Bryson field, opened the first Mississippi production for the area in flowing 12 barrels oil hourly on ½-inch choke after using 1000 gallons of acid. Production is from saturation at 5311-44 feet. The Bend was entered at 4434 feet and Mississippi at 5311 feet with elevation of 1228 feet.

Southeastern Jack County has a discovery in process of completion through the Continental Oil Company's Risch 1, SEc Sect. 13, Block 2, Henderson County School Lands, having tested 8,270,000 feet of gas with 18 barrels of oil daily from Marble Falls perforations at 4947-51 feet. Additional perforations have been made at 4959-68 feet to try for greater volume of oil. Oil-saturated conglomerate at 4340-50 feet in Bend, topped at 4306 feet, failed to respond to drill stem test, but is considered a possible source of production. The Marble Falls was entered at 4858 feet with elevation of 1089 feet. The Mississippian and Ellenburger, topped at 6252 feet and 6300 feet, respectively, were barren. Risch 1 is 4 miles east of 2 small pumpers and a gasser completed by Rathke Oil Company.

Montague County: Continental Oil Company's McNutt 1, 2½ miles southwest of Bowie, made steady gain in fluid yield when swabbed at intervals from Viola lime perforations at 6715-30 feet. This zone was treated with 1000 gallons, and on latest gauge swabbed and flowed 146 barrels of oil and 11 barrels of water daily. It will make a commercial pumper, becoming the first production for the state from the Viola.

Grayson County: The Pure Oil Company's Q. Little 1-A, Gordonville Ellen-

burger, or 11,000-foot prospect, offered its first encouragement for production when drill stem test of Strawn sand at 7445-69 feet returned nominal show of oil and gas with bottom-hole pressure calculated at 600 pounds. Drilling was underway in sand at 7490 feet.

Shamrock Oil & Gas Corporation's Taylor 2, C Section 11, Block 1, J. Poitevent Survey, is the second deep test for the Moore County sector of the Texas Panhandle to reach the Ellenburger, which has been explored by comparatively few tests within the district. Taylor 2 entered this Ordovician zone at 6323 feet with elevation of 3326 feet, and was without shows in drilling to 6709 feet. It will be plugged back to the regular gas zone. The interval between the base of the Permian and the top of the Ellenburger recorded noticeable thinning as compared to an 8012-foot Ellenburger failure situated 12 miles to the northeast. The latter logged the Mississippian and about 600 feet of Simpson.

Sherman County: Phillips Petroleum Company has included an Ellenburger, or 7000-foot, wildcat with its stepped up drilling program in this and other gas producing areas. E. Elliott-Ezra 1, near the center of the north line of the county, will make the deep exploration, and was trying to restore circulation at 1870 feet.

Dallas County: Stanolind Oil & Gas Company has temporarily terminated its 2-year deep wildcatting program in the district in junking its Herring 1 in unidentified lime at 7279 feet. The Cisco phase of the Pennsylvanian was entered at 4420 feet with elevation of 3594 feet.

East Texas

Rusk Wildcat to Attempt Completion in Pettit

H. C. Owens et al's Rousseau 1, Rusk County wildcat 4½ miles northeast of Minden, failed to improve production possibilities in drilling 150 feet of Travis Peak section to 7512 feet, and has landed 5½-inch pipe at 7429 feet to try for completion in the Pettit.

Van Zandt County: Northern Ordnance, Inc.'s Shelton 1, Martin's Mill prospect, tested salt water with nominal show of gas after using 2500 gallons of acid through upper Rodessa perforations at 8278-90 feet, thereby eliminating its chance of making a discovery. Humble Oil & Refining Company's Bruce 1, northeast of Myrtle Springs, resumed drilling at 8613 feet in dry Travis Peak sandstone after electrical log indicated no effective shows to this level.

Hopkins County: Humble Oil & Refining Company's Nichols 1, Pickton prospect that temporarily passed up promising production in 15-foot Rodessa zone, was drilling hard sandy-lime at 8645 feet in Travis Peak. Seven-inch pipe was cemented at 8536 feet after encountering water in the top Travis Peak sand.

Sun Oil Company's Turner 1, 1½ miles northeast, logged Austin chalk at 3965-4051 feet with elevation of 512 feet, and was drilling shale at 4660 feet.

Bowie County: Barnsdall Oil Company and Sohio Petroleum Company's Gifford-Hill 1 was drilling at 6670 feet in Cotton Valley, topped at 6265 feet.

Lamb County: Humble's J. A. Jackson 1, wildcat discovery prospect in Section 119 Block A. R. M. Thompson Survey, which drilled to 9191 feet and plugged back to 6815 feet, perforated liner with 120 shots at 6575-90 feet and 6605-6630 feet, set 2½-inch tubing with packer at 6250 feet, swabbed sulphur water with no shows of either oil or gas and is showing 1000 feet of sulphur water in hole.

BE SURE TO CHECK THE
Trading Post Section
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Southwest Texas

Wilson County Test May Make a Well at 5200 Feet

Interesting reports have been received regarding Stanolind Oil & Gas Company's Watkins 1, James Bradley Survey, Wilson County, which indicate it may make a well at around 5200 feet, but the well was being drilled below that depth at latest report with no details released by the operators.

McMullen County: The Atlantic Refining Company's Atkinson 1, ½ mile west of the new deep-sand production in the Alta Loma field, is drilling below 7240 feet, but has already flowed oil on a drill-stem test at 6896-6902 feet in

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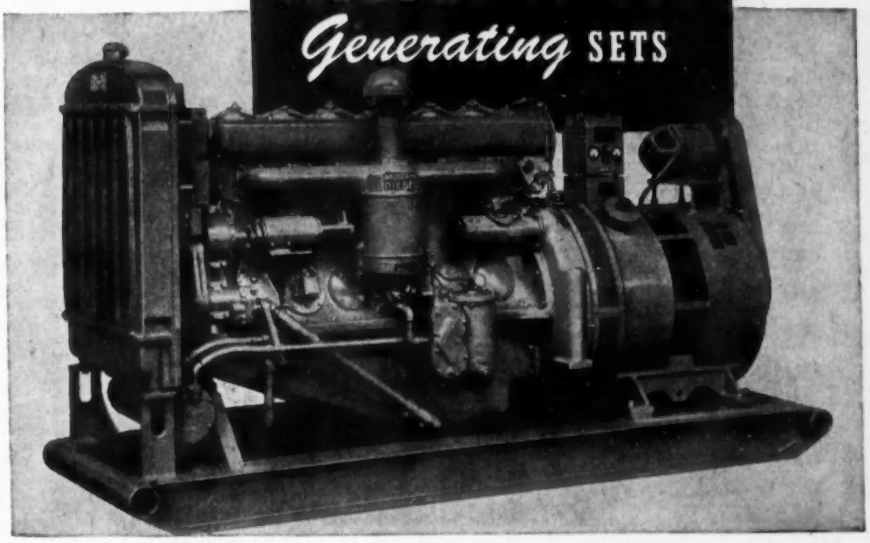

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the Carrizo-Wilcox section. On this test, it used a ¼-inch and a ⅜-inch choke and flowed the water cushion in 6 minutes, then flowed pipe line oil for 15 minutes after cleaning, developing 3200 pounds bottom-hole pressure. Recovery consisted of 3700 feet of pipe line oil.

In the San Caja area, Edwin M. Jones' Ezzell C-4, ½ mile extension attempt, perforated at 6467-69 feet in the Carrizo sand section and recovered 4 gallons of distillate on a drill-stem test, then perforated at 6931-33 feet in the Wilcox and flowed salt water when tested.

Quintana Petroleum Corporation's South Texas Syndicate D-3, 10 miles southwest of Fowlerton, is drilling below 10,750 feet, and is now reported headed for the Edwards lime or to 15,000 feet.

Lavaca County: Sterling Oil & Refining Company's Hoffman 1, discovery well east of the Brushy Creek field, has been gauged at an initial production of 93.3 barrels of 55-gravity condensate plus 3,853,000 cubic feet of gas daily through a ¼-inch choke.

Brooks County: Sun Oil Company's Boedecker 1-B, in the new Boedecker area, northeastern Brooks County, is testing at 6611 feet after having made tests through perforations at 6300-01 and 6260-75 feet.

Kleberg County: Tide Water Associated Oil Company is preparing to drill a wildcat 2 miles northeast of Ricardo in Kleberg County. The well is to be E. W. House 1, located on a 160-acre lease in Kleberg Town & Improvement subdivision, Block 36. It is scheduled to go to 8000 feet.

Bee County: Magnolia Petroleum Company's W. E. Erp 1, wildcat 9 miles west of Pettus in the J. B. Atkins Survey, is awaiting cement after coring to 7605 feet and setting 7-inch casing at 7150 feet.

Slick Oil Company has failed to make a long extension of the South Caesar field in its J. E. Copeland 1, 1½ miles southeast of production. Total depth is 7360 feet and top of the Slick sand was found at 6900 feet, carrying salt water. It has been abandoned.

DeWitt County: Transwestern Oil Company has completed Nettie Green 1, in the Slick-Wilcox field, extending production to the west and flowing 221 barrels of 35.3-gravity oil daily through a 5/32-inch choke with tubing pressure 1035 pounds and casing pressure 1250 pounds. It was perforated from 7627-43 feet with 46 shots.

Brooks County: Magnolia Petroleum Company's State-Marshall 1, in the Kelsey Field, which was completed early in 1941 as a gas well from perforations at 4707-10 feet, has been worked over and recompleted in the same sand, now producing oil. On potential test it showed 78.38 barrels of 45-gravity oil per day through a ¼-inch choke with tubing pressure 1100 pounds, casing pressure 1500 pounds, and gas-oil ratio 24,500-1.

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1—13⅜" Cameron SDA 3000 lbs. test with 13⅜" 3000 lbs. test fluid operated master valve—4½" rams and also connections, completely overhauled, also 8¼" Cameron fluid operated flow line valve.
1—13⅜" Cameron 3000 lbs. test, fluid closed, manual opened, mounted on steel skids, all connections, 4½" rams and 13⅜" Hughes master valve, 3000 lbs. test.
2—Shaffer, 9⅝" 3000 lbs. test, flanged with blank rams, completely overhauled.
1—13⅜" Shaffer, flanged preventer—3½" or 4½" rams.

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Texas Gulf Coast

Production Near Mykawa Field in Harris Opened

Texmass Oil Corporation has opened oil production on the northwest side of the Mykawa field, Harris County, completing through perforations at 4841-46 feet in its E. G. Siadous 1, making 240 barrels of 32-gravity oil per day through a 12/64-inch choke with tubing pressure 1400 pounds, casing pressure 1825 pounds, and gas-oil ratio 1100-1. Location has already been made for the second well on this lease, Siadous 2, which will be northeast of the first producer.

In the area 10 miles north of Houston, J. E. Ledeau's Overly Estate 1, near the Epsom Downs race track, attracted interest when it set a string of 5½-inch casing at 4050 feet to test a reported 12-foot body of sand showing oil found while drilling to 4092 feet. Casing was perforated last week at 4035-48 feet for a drill stem test, open 27 minutes, which recovered 5 stands of mud, 23 stands of muddy salt water, and a slight show. Perforations have been squeezed and it is now awaiting cement.

In northern Harris County, Eltex, Limited's Blanche Bender 1, northeast of the discovery well in the Spring field, has not been reported on since it started coring for the discovery Cockfield sand, picked up in the discovery well at 6239 feet.

Eltex's Anna Scott 1, also in the Spring area, is drilling below 4000 feet in shale.

Sun Oil Company's Bender 35, on the northwest flank of the Humble dome, is still testing, showing oil, but has not started flowing steadily. Total depth is 5750 feet with the casing set at 5250 feet.

Hardin County: Houston Oil Company & American Republics Corporation's Hardin County School Lands Fee 1, interesting wildcat in the area just south of Warren, is drilling below 6400 feet, scheduled through the Yegua section, following showings in the upper part of the Cockfield. On a 10-minute drill stem test at 5796-5808 feet, it registered 350 pounds working pressure showing some gas and recovering 60 feet of clear distillate.

Sun Oil Company's Merchant 1, wildcat in the Sour Lake area, is drilling below 7725 feet in hard shale.

Liberty County: Gulf Oil Corporation has not made a test in its Kirby Lumber Company C-22, deepest in the Cleveland field. Casing was set to bottom at 12,523 feet, and plans are to perforate for a test of the sand at 12,473-523 feet before coming back up the hole to test other points.

In the Kirby field, western Liberty County, General Crude Oil Company has worked over its Welch Fee B-2, originally abandoned as dry at 9976 feet in the latter part of 1942, and made a producing oil well. Casing was perforated at 7695-7765 feet with plugged-back depth 7805 feet, and the well flowed 151.4 barrels daily through a ¼-inch choke on potential test, making 38.2-gravity oil with gas-oil ratio of 1155-1.

Montgomery County: George W. Strake's Krohn W-1-B, important Wil-

cox test in the Conroe field, is drilling below 7712 feet after drilling out of the 6595 feet of 9⅝-inch protection casing, and has picked no new formation tops below the Cook Mountain at 6385 feet.

Pan American Production Company's Posey 1, northeast of the discovery well in the Pinehurst area in the southwest part of the county, is drilling after running electric log to 8693 feet.

Washington County: Magnolia Petroleum Company's Herman Lauter 1, expected to open a new flank sand in the Clay Creek field, started its pumping tests with casing perforated at 4606-11 feet, but no results are available. Before installing the pump, it swabbed at the rate of 4 barrels of oil an hour.

Magnolia is spudded and drilling surface hole in its Nettie Anderson 1, new wildcat in the Luke Lassassier League, 1 mile north of the town of Independence. It is scheduled to go to 9000 feet.

Colorado County: Cities Service Oil Company's Winnie Poole 1, in the Ramsey area, flowed at the rate of 74.1 barrels of 55.2-gravity distillate plus 2,611,000 cubic feet of gas daily on the test made through perforations at 8870-77 feet in the Wilcox sand, producing through a ¼-inch choke and showing tubing pressure of 2100 pounds. Another test will be made after perforating with additional holes between 8850 and 8870 feet.

Fort Bend County: Gulf Oil Corporation is stepping out gradually on the southwest flank of the Blue Ridge Dome and has made location for Invincible Oil Company 11, 933 feet south of its Invincible 10, which was completed last week, making 135 barrels of 39-gravity oil daily through a ⅛-inch choke from perforations at 4110-30 feet. The Blue Ridge field has had steady drilling since discovery of the flank pay by Phillips Petroleum Company several months ago.

Jasper County: Humble Oil & Refining Company's Nona Mills Company, Rockland area, is drilling below 8880 feet after drilling out of the 8658-foot string of protection casing set before going ahead toward its 12,000-foot objective depth.

Wharton County: Sam G. Harrison is still making a series of tests in his Gus Schulze 1, wildcat in the southwestern part of the county, northeast of the East Mauritz field, but no gauges have been announced. At latest report it was testing a small amount of oil from perforations at 5560-67 feet in the Frio formation.

South Louisiana

Test Near Houma Expected To Yield Gas, Condensate

Union Oil Company of California is opening a field just east of Houma in Terrebonne Parish, which probably will be a producer of gas and condensate.

Total depth is 12,618 feet, at which it was still in the Miocene formation, and a string of 5½-inch casing was set in Gaidry 1 at 10,352 feet and perforated with 23 shots at 10,290-298 feet. On a drill-stem test with ¼-inch choke at bottom and ⅛-inch at top, using a 6000-foot water cushion, it flowed in 6 minutes with pressure 1000 pounds, and after flowing the cushion, flowed dry gas under pressure of 3600 pounds.

Tubing was being run late last week for completion at this point. This is the second well by Union on this prospect, the company having drilled Calvert & Todd 1, a little more than a mile north and abandoned last year. Originally known as the North Houma prospect, the discovery itself will be just east of the town of Houma, and consequently probably will change the final field-name designation.

Sun Oil Company's Blanchard Pool 1, wildcat in 43-17s-16e, Humphreys prospect, was drilling below 9994 feet in shale. In the same parish, Humble Oil & Refining Company was drilling its South Coast Corporation 1 in the South Houma area at 3783 feet in shale.

In the Four League Bay area, Louisiana Land & Exploration Company's LL&E Fee 1, was drilling below 9470 feet in sandy shale.

Calcasieu Parish: Continental Oil Company is awaiting cement in Glen Greathouse 1, wildcat in the South Lake Charles area, following a squeeze job made with perforations at 10,894-904 feet. Salt water was recovered on a test at this point, and also on a test of perforations at 10,904-914 feet, which had also been squeezed off. Another test will be made above both sets of perforations.

Union Oil Company of California has made location for a test in 3-11s-9w, west of the Continental's Prairie Land & Canal Company 1-A, recently completed as the second well at East Moss Lake field.

M. P. O'Meara's E. Yust et al 1, in 28-10s-12w, northeast of the Vinton field, originally scheduled to drill to 8000 feet, is drilling below 8350 feet after running electric logging survey to 8167 feet.

Vermilion Parish: The Pure Oil Company's Ferguson-Benoit Unit 1, outpost test on the southeast flank of the West Gueydan dome, is drilling below 10,360 feet after an electric log run to 10,347 feet which indicated a good sand body with showings of gas and condensate. It will drill to contract depth of 10,800 feet before running casing for completion.

Fohs Oil Company's Mulvey-Baker 1, in the Gueydan field, awaiting cement at 9873 feet after running 5½-inch production string.

Union Oil Company of California's State B-1, outpost ¾ mile southwest of the discovery well at West White Lake field, is drilling below 9500 feet in shale.

Beauregard Parish: Magnolia Petroleum Company's Lutcher-Moore C-1, in the West Pine Grove area, was delayed by a fishing job at 12,222 feet.

Iberia Parish: Pure Oil Company's L. L. Trahan 1, wildcat west of New Iberia in 9-12s-6e, is drilling below 10,867 feet and is scheduled to 12,000 feet. A string of 7-inch protection casing had previously been set to 10,010 feet.

Humble Oil & Refining Company has set 7-inch casing at 9565 feet in its Petit Anse B-2, in the Avery Island area, after stopping at 9629 feet in salt, but is delayed in testing by having to cement a leak in the casing.

☆

A. G. ANDERSON has been appointed general traffic manager of Socony-Vacuum Oil Company, succeeding the late L. H. Benner. Anderson, assistant general traffic manager since 1926, for the last two years has been on loan to the petroleum industry committee, District 1, of PAW as general manager of the supply and transportation committee.

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Bossier Parish Discovery Improved by Perforations

Barnsdall Oil Company and Sohio Petroleum Company perforated higher up in the Bodcaw sand at J. T. Hanks 1, new gas-distillate discovery NW SE 7-20n-12w, 6 miles northwest of Benton in Bossier Parish. Originally, the well flowed 3.3 barrels of 58.4 distillate per hour accompanied by 1,700,000 feet of gas from 90 perforations opposite the sand at 8135-50 feet. Operators pulled the drill stem and perforated the remainder of the sand from 8114-35 feet. After running tubing and packer the well flowed 5 barrels of distillate per hour and 3,000,000 cubic feet of gas on a 6-hour test of total perforations using ¼-inch chokes. Tubing pressure was 1875 pounds, casing sealed, gas-condensate ratio 25,500/1.

The well will be given a 3-day test before operators apply to the commission for a new field designation. The well also logged porosity in the Cotton Valley "D" sand at 8003 feet which might possibly be tested, and slight porosity was carried by the "F" Sand from 8368-86 feet. The Travis Peak section logged 3 series of sand with possible oil and gas shows from 6036-44, 6049-54, and 6084-92 feet. Top of Travis Peak was 4635 feet. The discovery well was drilled to 8765 feet in shale. A string of 7-inch casing was set on bottom after correlation of log.

J. R. Hayden Trustee's C. L. Ellerbe 1, C E½ NE 3-20n-13w, 3 miles northwest of Hanks 1, abandoned sometime ago at 5350 feet in Travis Peak without logging any show of oil, may be deepened to the Cotton Valley. Correlated with the new discovery, the abandoned hole is reported 60 feet higher on structure at the Anhydrite and 28 feet higher on the Travis Peak.

Lincoln Parish: The California Company's Jessie Mae Norris 1, C NW NE 15-18n-1w, was treated with 5000 gallons of acid through ripped casing from 9275-9306 feet but failed to get any showing of oil or gas, and planned to rip casing higher up in the hole. The well is still considered a possible gas or gas-distillate field opener, and has been testing for a month. Failing to obtain commercial production from the lower horizons, it is believed a good chance lies at the 9100-foot level which had shows of gas.

Big West Drilling Company is awaiting cement at N. B. Gill Estate 1, C NW SE 35-20n-2w, deep wildcat in the northeastern sector of the parish, after setting surface casing at 115 feet. The well is at 122 feet.

Webster Parish: Hunt Oil Company's Mrs. O. G. Roberts 1, 11-23n-10w, is drilling below 6745 feet. Midway was logged at 1190 feet, Nacatoch sand at 1875 feet, and Massive Anhydrite from 4486-4705 feet. A 17-minute drill-stem test at 5713-65 feet recovered 60 feet of oil and gas-cut mud.

Phillips Petroleum Company's Docia 1, NE NW 18-22n-9w, is drilling below 2894 feet. Elevation is 280 feet.

De Soto Parish: Dale W. Moore's E. P. Lee 5, 33-14n-13w, a new producer in the Holly field, made 36 barrels of oil in 6 hours through a 22/64-inch choke on tubing. Casing pressure averaged 520 pounds and tubing pressure 55 pounds. Twelve perforations were made from 2844-48 feet. The hole was drilled to total depth of 2870 feet with string of 5½-inch casing cemented on bottom.

More has started work at E. L. Scott 11, SE NW 33-14n-13w, which will seek pay from the same horizon.

Moorehouse Parish: The Texas Company abandoned Annie E. Kimball 1, 3-23n-9e, after recovering 1500 feet of salt water and 1000 feet of drilling mud during a 20-minute drill-stem test of the Smackover lime from 4750-5036 feet, total depth. No shows were logged above the Smackover.

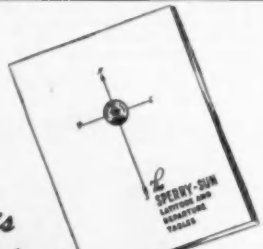
Catahoula Parish: Sinclair Prairie Oil Company will seek Wilcox production in two wildcat wells in the parish: Gabe Fisher 1, C NE NW 26-9n-6e, and Webb 1, C NE NE NW 10-8n-5e.

West Carroll Parish. Arkansas Fuel Oil Company will begin operations soon at Francis Briggs et al 1, 9-21n-11e, scheduled 7000-foot test wildcat on a sizeable block of acreage in the extreme eastern part of the parish.

Claiborne Parish: Big West Drilling Company has staked location and is moving in material for D. W. Allgood 1, C SW SW 22-22n-5w, deep wildcat test about 12 miles northeast of Homer. A 10,270-foot dry hole is located in 16-22n-5w. Nearest production is Lisbon field, 6 miles southeast.

☆

DON G. SMITH has been named oil field representative in Texas, Louisiana, Arkansas and Oklahoma, with headquarters in Dallas, of Western Block Company, Lockport, New York. He was formerly stationed in Lockport. The company manufactures snatch blocks for oil field use.



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Arkansas

Salem Church Test Being Tested After Perforation

Mc Alester Fuel Company drilled plug out of 5½-inch casing cemented at 7065 feet in Wilson-McRae 1, C NW SE SW 28-16s-18w, second test in the Salem Church field of Union County, and on swabbing to test from 7065-67 feet recorded a flow of salt water. The well is at 7067 feet in Smackover lime. Operators plugged back and perforated further up the hole at 7026-34 feet with 32 shots. Further testing is proceeding. The well recovered 150 feet of distillate and no water on a drill stem test from 6947-7050 feet in the Smackover. Production string was cemented at 7065 feet.

R. H. Crow is building roads to Randolph Smith 1, NE NE NE 26-18s-15w, near Crescent Drilling Company's Root 1, C NE NE 25-18s-15w. The location for Smith 1 was reported abandoned in September due to high water. Water having subsided it is probable that tools will be moved to location soon. The Root 1, abandoned and then taken over by Crow, is pumping 5 to 10 barrels per day from the Nacatoch sand.

Columbia County: G. H. Vaughn abandoned Bodcaw Oil Company 1, C NW NE 14-18s-23w. The wildcat logged Buckner at 9170 feet, Smackover at 9205 feet and porosity at 9220 feet but failed to log showings at total depth of 9253 feet.

Southwood Oil Company squeezed with plastic in perforations from 8283-92 feet at L. H. Pearce 1, C NW NE 10-18s-20w, in the Calhoun field. It was the first time plastics had been used to eliminate salt water encroachment from the Smackover, but the results were not desirable, and the well tested 70 percent salt water.

Ashley County: Union Producing Company is drilling below 10,502 feet in the Eagle Mills formation at Crossett Lumber Company E-1, 12-19s-7w, deepest drilling well in the state.

Johnson County: Arkansas-Louisiana Gas Company's S. M. Hudson 1, C NE 15-10n-24w, deep cable tool wildcat test of the Arbuckle lime, Clarksville field, is drilling in hard dark sand at 4946 feet with no shows of oil reported.

Pope County: Stanolind Oil & Gas Company recovered fish at 3888 feet and drilled to 3904 feet, where the test has been shut down for repairs at G. B. Maxwell 1, C SE SE 18-8n-18w.

Washington County: Active wildcatting has been renewed with the staking of several locations this week. Only 3 new producing areas, none of major importance, have been discovered in Arkansas the past year. Plymouth Oil Company has located R. G. Williams 1, 24-13n-30w, ½ mile south of Winslow townsite, and will drill to 6000 feet with cable tools. In Miller County, Atlantic Refining Company is building roads for Montana Realty Company 1, 17-17s-28w, Smackover lime wildcat, 10 miles south of Texarkana.

Chicot County: Placid Oil Company went to 4487 feet in Cox and Wilson 1, C SE SE 34-17s-2w, without logging any important shows and abandoned the well after running electrical survey.

Southeastern

Lamar Test Likely to Open Oil Field from Tuscaloosa

Two recent successful drill-stem tests in Gulf Refining Company's C. V. Cooper 1, in the Baxterville area of Lamar County, Mississippi, have indicated it is almost certain to open a new oil field producing from the Marine Tuscaloosa zone.

Late in the week it was coring below 8735 feet following the second of these tests, made at 8725-35 feet, which recovered a 550-foot water cushion and 3000 feet of clean, pipe line oil in 12 minutes, using ¼-inch chokes at top and bottom. The oil is of approximately 16 degrees gravity, but it appeared to be lighter and more fluid than the higher gravity oil produced at Heidelberg. Flowing pressure was 3500 pounds.

On the first test in this section, made at 8687-99 feet, also using ¼-inch chokes, it recovered 3000 feet of 17.5-gravity oil and did not show any formation water. Should this well prove productive, it would be the most southerly field in the state. It is situated on the western edge of the McHenry High which extends over into western Alabama. Earlier, it logged showings in the Upper Tuscaloosa, starting at 7736 feet and extending down to 7875 feet, which showed gas and distillate on drill-stem tests.

On the old Tatum salt dome, Shell Oil Company's Hibernia Bank & Trust Company 1 is drilling below 6934 feet in shale.

In the extreme northwest corner of Lamar County, Sinclair-Wyoming Oil Company is setting up rig for its Newman Lumber Company 3 in Section 5-5n-16w, another wildcat started to test the Tuscaloosa zone.

Warren County: Magnolia Petroleum Company's H. D. Ragsdale 1, interesting wildcat 6 miles east of Vicksburg, has reached 8790 feet, and is reportedly making a drill-stem test at bottom of the hole. When it topped the Midway at 6003 feet the well was thought to be checking favorably on subsurface correlation, but operators have not said what showings have been found.

Sinclair-Wyoming Oil Company is preparing to drill Mary G. Blake 1, wildcat 6 miles northeast of Vicksburg and 7 miles northwesterly from the Magnolia wildcat.

Adams County: The Pure Oil Company's J. M. McDowell 2, southwest of the Cranfield field, has squeezed all perforations previously made just above 10,330 feet, and was drilling at 10,407 feet. It probably will come up the hole to try for production in the Tuscaloosa showings at around 10,300 feet, but will first prospect to the Glen Rose.

Humble Oil & Refining Company's Ida Stowers A-1, in northern Adams County, has run electric log after drilling to 9991 feet in hard sandy shale, and was coring at 10,070 feet in sandy shale.

Simpson County: Jesse McKee's J. B. Bishop 1, wildcat in Section 13-2n-1e, in the northwestern corner of Simpson County, was spudding at time of latest report, scheduled to drill to 11,000 feet on a prospect originally held by Sinclair-Wyoming Oil Company and on acreage farmed out by them. Steinberger & Dayvault of Houston will be contractors.

Jefferson Davis County: Superior Oil Company's Willie Durr 1, new test a mile east of Sid Richardson's Gwinville discovery, should be spudding in the next few days. It has laid gas line from the Richardson well for fuel, and will test the Tuscaloosa.

Richardson's Berry 1, completed a couple of months ago, appeared for the first time on the Mississippi production schedule, showing production of 346 barrels during August.

Gulf Refining Company's D. L. Mullins 1, 2½ miles southwest of the Richardson well, is drilling below 7500 feet in shale, still about 400 feet above the upper of the two pays from which the Gwinville well is producing gas and condensate.

Alabama

W. O. Woodward, Trustee (H. L. Hunt) has staked location for Mary Green 1, 5000-foot wildcat test in 31-11n-4w of Southwestern Choctaw County, 3½ miles west of Gilbertown production. Hunt Oil Company is drilling below 7232 feet in Harry B. Jones Trustee 1, C SE SE 3-1n-11e, deep wildcat test in Escambia County.

Washington County: Humble Oil & Refining Company is drilling in hard sand at 6547 feet in J. R. Williams B-1, C SW NW 20-6n-4w, deep test which so far has reported no showing of oil.

The Texas Company's N. S. Stallworth & Company 1, C SW NW 10-3n-3w, is drilling at 6340 feet, and A. C. Derr, Trustee's Hobson 1, 9-8n-2w, is drilling below 201 feet after setting 10-inch casing.

Florida

Humble Oil & Refining Company is rigging up at Gulf Coast Realties 4, 20-48s-30e, in Collier County. In Dade County the same operators have drilled 6950 feet in State 1, C NE NW 30-55s-35e, and have shut down to repair motors. Humble's G. C. Carleton Estate 1, in Highlands County, SW NE 34-38s-29e, is still waiting on rig.

Gulf County: The Pure Oil Company's C. C. Hopkins 1, C SW NE 31-6s-9e, has cleaned up a fishing job at 3903 feet and is drilling below 4688 feet.

Leon County: Stanolind Oil & Gas Company's St. Joe Paper Company A-1, NE NE 15-2s-2e, is fishing at 1650 feet.

Monroe County: American Republics Corporation's State 1, T-59s-40e, in Card Sound, is preparing to move in.

Rocky Mountain Area

Sand Draw, Wyoming, Deep Test Shows Saturation

Sinclair-Wyoming Oil Company's Unit 1 in SW NW NW of 14-32n-95w, Sand Draw deep test of the Sand Draw gas field, Fremont County, Wyoming, cored several feet of saturation in the Dinwoody, top at 6896 feet, and preparations are being made to run drill-stem test. The well was drilled to a total depth of 6913 feet.

Kirby Creek: Pacific Western et al, Government 1, wildcat test on the Kirby Creek structure in SE NE NE of 21-43n-92w, was a failure in the Madison lime and is now testing the possibilities of the Tensleep sand. The top of the Madison was logged at 4342 feet and on 20-minute drill-stem test at 4350-4427 feet, yielded fresh water. Casing was perforated opposite the Tensleep at 3870-3880 feet and the well swabbed for 3 hours without lowering the water level. The casing will now be perforated at 3775-3800 feet. The Tensleep was topped at 3678 feet.

Bridge Creek: Connor Tank Company is moving in cable tools for a wildcat test of the Bridge Creek structure in SW SW NW of 26-41n-91w, Fremont County, Wyoming.

Illinois Basin

Two Wells in Mattoon Pool Area of Coles Planned

Anthony F. Keating's Gibson 1, NW SE NE 9-10n-7e, wildcat northeast of the town of Neoga and on Carter Oil Company farmout acreage, Cumberland County, Illinois, is drilling below 2090 feet without a show. The McClosky lime is expected at 2200 feet.

After completing the well, whether it is a producer or dry, the operator plans to drill two wells in the Mattoon pool area of Coles County. Probably both wells will be on Carter acreage.

Coles County: Carroll and others have completed George Rudy 1, SWc 24-12n-7e, extension of the Mattoon pool, for 45 barrels of oil and no water from Rosiclare sand at 1978-84 feet, in 24 hours.

Daugherty and Clark are spudding Clark 1, NE SW NW 32-12n-8e, a wildcat test, newest for Coles County.

Douglas County: Ohio Oil Company's Shaw 1, SW SW SW 36-16n-8e, one of the state's most interesting wildcats, is drilling with cable tools below 3385 feet in the Franconia series. No oil shows have been reported and the drill is through the Devonian, Trenton and St. Peter formations. Located on a 10,000-acre block in an area recommended by the Illinois State Geological Survey, the well is scheduled to 6000 feet and on the basis of stratas tested will be the deepest ever drilled in the state.

White County: Phillips Petroleum Company's Tully 5, SW NE NE 21-6s-10e, in the north end of the pool, made 925 barrels of oil from McClosky lime at 3034-44 feet after 4000 gallons of acid.

Edwards County: Bonnie Heath's Schmittler 1, NE NE NW 12-3s-10e, 6 miles south of Albion, swabbed 35 barrels of oil per hour natural from Biehl sand at 1970-99 feet. The same operator has Schmittler 2, SE NE NW 12-3s-10e, drilling below 1500 feet.

Wayne County: The Texas Company's Greathouse 1, SE NW 27-1n-6e, Johnsonville pool, is drilling below 3750 feet. The well is slated to test the Devonian lime, not now productive in the pool.

Kentucky

The Uniontown pool in Union County has been given a new pay horizon at Gulf Refining Company's Pria 2, 11-P-19, at the north edge of the pool's producing area. On a 1-hour drill-stem test of Hardinsburg sand, the well showed 400 feet of oil and 150 feet of oil-cut mud. Test was made at 1967-81 feet. Operator is drilling below 2190 feet after finding a show in Cypress sand at 2164-70 feet.

The same pool was given a slight extension at Walters and others' Clements 1, 25-P-20, in the Cypress sand. On a drill-stem test, the well showed 600 feet of oil. Test was made at 2294-2304 feet.

Michigan

Pays in Monroe Tested by Montcalm County Outpost

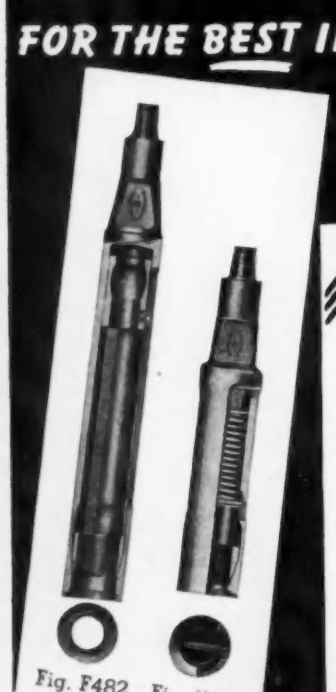
Gordon Oil Company will drill deeper on Paris 1, SE NW NW 6-12n-8w, Cato Township, Montcalm County, after testing two water-cut pays in the Monroe.

The outpost logged Dundee lime at 3429 feet with water at 3473-83 feet. Casing was re-set to 3499 feet with a Monroe pay logged at 3542 feet. It flowed 19 barrels oil and then died and a bailer run showed 2000 feet of water and 800 feet of oil. Deepened to 3552 feet, another pay was picked up with the well flowing 20 barrels of fluid per hour, estimated 20 percent oil and 80 percent water.

Tuscola County: Shell Oil Company's Woidan 1, NW NW NW 16-13n-11e, Novesta Township, is shut down for orders at 4149 feet after perforating casing in the Monroe section from 2800 to 3800 feet. Cores and drill-stem test indicated possible commercial pay in the Monroe but tests after perforating lacked especial interest. The wildcat is one of two drilled by Shell in Michigan this year on the basis of seismograph surveys.

☆

DEAN C. WELLMAN, geologist, recently resigned from The Pure Oil Company, Tulsa, to join Shell Oil Company, Centralia, Illinois.



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WESTERN CANADA

800,000 Acres Now Held Near Devonian Discovery

Imperial Oil Ltd, Standard Oil Company (New Jersey) subsidiary, and Canada's largest oil operator, has joined in the big lease play on the Southern Alberta Plains, resulting from the Devonian limestone oil strike at California-Standard's Princess 8 well.

Imperial has acquired a block of about 95,000 acres, located between Tilley and Brooks, the northern boundary of the block being 12 miles south and west of the Princess oil strike.

The Imperial acquisition has raised total acreage holdings in a 25-30-mile radius of the Devonian discovery to more than 800,000 acres, with several more lease deals now underway. California-Standard is the biggest holder in the area, with some 340,000 acres taken to date.

Shell Oil Company of Canada has taken up a geophysical reservation from the Alberta government covering 38,880 acres in the Innisfree area on the Central Alberta Plains. The northerly part of the block lies about two miles west of the Verner May 1A, now testing oil and gas shows in the Lower Cretaceous. The Shell block covers the bulk of Crown rights in 51-10w4th, 50-10 and 11w4th, a mile-wide strip on the east side of Twp. 51 Rge. 11w4th, and a mile-wide strip on the north side of 49-10 and 11w4th. Shell plans immediate geological work on its holdings.

California oil operator William G. deKoch, who has been active on the Central Alberta Plains for several years, has staked locations for a wildcat and extension test in the Lloydminster oil area.

The wildcat, Iscris-M No. 2, is to be drilled in 1sd 8 2-54-6w4th, half a mile northwest of the Iscris-M 1, drilled this spring to 2133 feet into the top of the Devonian lime. The No. 1 was abandoned, but showings obtained were sufficiently encouraging to warrant the new venture. The well is about 20 miles north of the Vermilion oilfield and 36 miles northwest of the Lloydminster oil area. The Extension well, Skeet 2, is to be in 1sd 3 35-49-1w4th, ⅜ mile east and south of the recent successful completion, Skeet 1, and just over ½ mile southeast of the discovery Shaw 3.

☆

THOMAS J. GARIN, assistant city editor of the Jamestown, New York, Post-Journal, has been named director of information by the Pennsylvania Grade Crude Oil Association.

W. C. SMILEY, of Emsco Derrick & Equipment Company, has been named expediter in the petroleum manufacturer section, materials division of PAW, and left Houston for Washington October 11 to assume his new duties. He has been granted a leave of absence from Emsco.

PERRY LARSON is manager of Texas operations for Nu-Enamel Oil Operating Company, Chicago firm that has acquired interests in the Hildreth field, Montague County, North Texas. Larson has headquarters at Bowie, Texas.

U. S. Exploratory Completions

ARKANSAS WILDCATS

Chicot County—Failure: Placid Oil Co.'s Cox & Wilson 1, c se se 34-17s-2w, elev 125, abnd 4487 ft.

Columbia County—Failure: G. H. Vaughn's Bodcaw Oil Co. 1, c nw ne 14-18s-23w, elev 267, logged Buckner 9170 ft, Smackover 9250 ft, porosity 9220 ft, abnd 9253 ft.

CALIFORNIA WILDCATS

Butte County—Failure: Pacific Western-Geo. F. Betty's Greenlee 1, 25-19n-2e, Basement material 3467 ft, abnd 3491 ft.

Fresno County — Oil Discovery: Amerada's Calif. Lands 76-15, 15-17-18, Lanare area, 180 bbls 31-gr oil, 0.3% cut, 82mcf gas, 18/64-in, td 8097 ft.

Kern County—Failures: J. & S. Exploration Co.'s Crookshank 2, 19-30-38, abnd 1100 ft.

Tide Water's Shafter 86-A7, 7-28-25, 1st Vedder 12,296 ft, 2nd Vedder 12,512 ft, abnd 12,618 ft.

Kern County—Oil Discovery: Tide Water's K. C. L. 62-22, 22-30-26, Gosford area, 1200 bbls 28.2-gr, 24.0% cut, 1-in, td 7942 ft.

Orange County — Failure: Richfield Oil Corp.'s Hamrick-Olive 1, 8-4-9, abnd 2679 ft.

San Mateo County—Failure: Richfield Oil Corp.'s Lena Souza 1, 13-7s-5w, San Gregario area, abnd 5211 ft.

FLORIDA WILDCAT

Collier County — Failure: Humble's Gulf Coast Realties 2, c sw se 30-48s-30e, saturated lime 11,636-90 ft, dr pipe stuck, abnd 13,512 ft.

ILLINOIS WILDCATS

Cole County—Failure: Texas Co.'s Coldren 1, sw se ne 4-11n-11w, abnd 2406 ft.

Hamilton County—Oil Discovery: Phillips' Leach 1, se se nw 12-4s-6e, pump 85 bbls, McCl 3420-26 ft, td 3450 ft.

Hamilton County — Failure: Magnolia's Kaufman 1-A, se se nw 7-4s-6e, abnd 3453 ft.

Jasper County—Failure: Amisco's Raef 1, ne sw 29-6n-10e, abnd 2900 ft.

Perry County—Failure: Texas Co.'s Monti 1, sw sw sw 24-4s-4w, abnd 2868 ft.

INDIANA WIDCATS

Greene County—Failure: Shell's Jones 1, ne ne nw 23-7n-4w, abnd 1500 ft.

Jackson County—Failure: George Clore's Lucas 1, nw se 16-6n-4e, abnd 425 ft.

Posey County — Failure: H. L. Coke's Murphey-Hill Comm 1, se sw se 7-4s-13w, abnd 3032 ft.

Wabash County—Failure: Texas Co.'s Krom 1, se se nw 1-28n-6e, abnd 1106 ft.

KANSAS WILDCATS

Barber County—Failure: Gulf's Bob 1, se se ne 28-30s-12w, Arb 4640 ft, abnd 4650 ft.

Barton County—Failures: Phil-Han et al's Lewis 1, sec se 3-16s-13w, Lans 3077 ft, Arb 3400 ft, abnd 3440 ft.

Mouser Drlg. Co.'s Kath 1, se ne se 1-19s-13w, Arb 3382 ft, abnd 3414 ft.

Barton County—Oil Discovery: Vickers Oil Co.'s Workman 1, nec 33-20s-12w, pump 69 bbls oil, 25% wtr, 3500 gals acid Arb 3410-55 ft, td 3455 ft.

Butler County—Failures: Ben Grallup et al's Kenyon 1, sec 19-24s-8e, Miss 2744 ft, abnd 2760 ft.

Wood River's Lucas 1, ne sw nw 2-27s-7e, Miss 2748 ft, abnd 3215 ft.

Decatur County—Failures: Sinclair Prairie's Bremer 1, nwc se 28-4s-28w, Cong 4114 ft, Arb 4422 ft, abnd 4656 ft.

Sterling Drlg. Co.'s Randall 1, ne sw 11-5s-27w, Lans 3613 ft, Arb 4044 ft, Gr 4132 ft, abnd 4144 ft.

Ellis County—Failures: El Dorado Rfg. Co.'s Gunther 1, nec nw 9-11s-19w, Cong 3619 ft, Simp 3651 ft, Arb 3683 ft, abnd 3707 ft.

Sunray's Hauschild 1, nwc sw 17-15s-19w, Lans 3279 ft, Topeka 2992 ft, Heeb 3242 ft, Mar chert 3567 ft, Reagan 3608 ft, abnd 3621 ft.

Greenwood County—Failure: Ward McGinnis' Leedy 1, swc nw 31-25s-12e, Miss 1735 ft, Arb 2089 ft, abnd 2096 ft.

Leavenworth County — Failure: Dan McLaughlin's Seufert 1, sw sw ne 31-10s-22e, Miss 1136 ft, abnd 1276 ft.

McPherson County—Oil Discovery: Bay & Westgate Greenland's Meyers 1, nec nw 7-19s-1w, pump 100 bbls oil, perf 18 shots 2952-56 ft, td 3170 ft.

Rice County—Failure: Wolf Creek et al's Kratzer 1, se se ne 22-19s-7w, Lans 2904 ft, Miss 3290 ft, Simp 3597 ft, Arb 3664 ft, abnd 3677 ft.

Rush County—Failure: Cities Service's Urban 1, swc nw 10-16s-17w, KC 3310 ft, Cong 3558 ft, chert 3582 ft, Arb 3597 ft, abnd 3630 ft.

Sedgwick County—Failures: Nelson Drlg.'s Brears 1, ne sw se 5-26s-2e, Lans 2512 ft, Miss 2974 ft, abnd 3007 ft.

Stanolind's Marx 1, nw ne nw 10-27s-4w, Dol 4179 ft, Simp 4185 ft, Arb 4297 ft, abnd 4310 ft.

Stafford County—Failure: H. A. Hershfield's Sittner 1, nw nw sw 4-22s-12w, Arb 3667 ft, abnd 3685 ft.

Trego County—Failure: Sinclair Prairie's Parks 1, sec nw 18-14s-24w, Arb 4500 ft, abnd 4515 ft.

KENTUCKY WILDCATS

Daviess County—Failure: Sinclair Prairie's Bartlett 1, 7-O-28, abnd 2100 ft.

Henderson County—Failure: Douglas et al's Davis 1, 13-P-24, abnd 917 ft.

Union County — Failure: Hiawatha O&G Co.'s Waller Est 1, 25-O-20, abnd 2818 ft.

NORTH LOUISIANA WILDCATS

Bienville Parish — Gas Discovery: G. H. Pierce et al's E. W. Merritt 1, (OWWO) 13-17n-7w, otd 7661 ft, pb 5740 ft, perf 20 shots 5692-5710 ft, flow est 2.5 mln gas, some sw and distl, shut in tp 400 lbs.

De Soto Parish—Failure: C. C. Schoonmaker's Sample 1, 12-13n-14w, abnd 2900 ft.

Morehouse Parish—Failure: Texas Co.'s Annie E. Kimball 1, 3-23n-9e, elev 98 ft, Wilcox 1553 ft, Smackover 4768 ft, abnd 5036 ft.

Richland Parish — Failure: Humphrey & Wynne's D. R. Sartor 1, sec 27-15n-6e, elev 80 ft, Cane River 950 ft, Wilcox 1134 ft, Midway 2180 ft, Tuscaloosa 2950 ft, L. Cret. 3631 ft, abnd in Igneous rock 4408 ft.

SOUTH LOUISIANA WILDCATS

Ascension Parish—Failure: R. Y. Walker-Calapor Mfg. Co.'s Realty Operators 1, start common cor sect 1-4 go 3630 wly alg nl sect 4 nly at ra 824 in 1-11s-3e, abnd 11,227 ft.

Jeff Davis Parish—Oil Discovery: Continental's King Corp. 1, 1650 n 330 w of sec 30-7s-6w, Bayou Serpent area, perf Ortego 7135-45 ft, co 7780 ft, flow 178 bbls 35.7-gr, 0.2% wtr, 6/64-in, td 9302 ft.

MICHIGAN WILDCATS

Allegan County—Failure: Cook and Fortneys' Marron 1, sw sw se 31-3n-12w, Traverse lime, abnd 1635 ft.

Arenac County—Failure: Mich. Oil Co.'s Spusta 1, ne sw nw 27-19n-4e, Dundee lime 2747 ft, abnd 2893 ft.

Isabella County—Failure: Carter Oil Co.'s Fish 1, ne sw se 4-13n-6w, Brown Lime 1232 ft, abnd 1490 ft.

Lapeer County—Failure: Sinclair Wyoming's McIntyre 1, sw sw sw 28-9n-9e, abnd 2775 ft.

Montmorency County—Failure: Ralph McLellan's Miller 1, sw sw nw 10-30n-3e, Monroe 1802 ft, abnd 2218 ft.

Ottawa County—Failure: Rex Oil & Gas Co.'s VanOrder 1, nw nw sw 14-5n-15w, abnd 1681 ft.

SOUTH LOUISIANA NEW PAY TEST

Plaquemines Parish—Potash Oil Discovery: Humble's Orleans Levee Board 66, start n cor nec sect 13 go swly on nwl 6706 th 140 sely at ra to len in 13-18s-15e, perf 77 shots 1802-20 ft, flow 72 bbls 18.8-gr, 12/64-in, td 1918 ft.

MONTANA WILDCAT

Pondera County—Failure: Hagen Structure Oil Co.'s Anderson 1, ne se ne 9-31n-7w, Hagen structure, Colorado 1375, abnd 2180 ft.

NEBRASKA WILDCAT

Hitchcock County — Failure: Texas Co.'s Taunton 1, se nw nw 22-2n-35w, Stratton Prospect, pre-Cambrian granite 4662 ft, abnd 4663½ ft.

OKLAHOMA WILDCATS

Garvin County — Oil Discovery: Sinclair Prairie's Allred 1, ne nw se 20-3n-3e, pump 112 bbls 26-gr, Simp 1897-1918 ft, td 1919 ft.

Lincoln County—Failure: Stanolind's Ross 1, sw se se 27-13n-3e, 1st Wx 5415 ft, 2nd Wx 5480 ft, abnd 5506 ft.

Logan County—Oil Discovery: Kerlyn Oil's Green 1, se nw 36-18n-4w, flow 136 bbls, 2-in tb, Lay sd perf 150 shots 4807-33 ft, td 4855 ft.

Pawnee County — Failure: Continental's Meyerdirk 1, sw se nw 10-22n-5e, abnd 3738 ft.

Pottawatomie County — Failure: Ashland Rfg.'s Stephens 1, ne ne sw 31-6n-5e, abnd 3592 ft.

Stephens County—Failure: Amerada's Sledge 1, ne sw se 19-1s-5w, abnd 3623 ft.

Texas County — Gas Discovery: Phillips' Hazel 1, c 35-1n-13e, flow 10,500,000 gas day, td 2930 ft.

WEST TEXAS WILDCATS

Borden County—Failure: Thos. W. Doswell et al's Cantrill 1, c ne ne T&P Ry. 22, blk 32, T-6-N, elev 2949 ft, anhydrite 1510 ft, San Andres 3400 ft, abnd 5024 ft.

Yoakum County—Failure: Woodley Pet. Co.'s

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Ruth Googins 1, c nw sw sec 249, blk D, J. H. Gibson sur, elev 3733 ft, top brown lime 4140 ft, abnd 5505 ft.

SOUTH CENTRAL TEXAS WILDCAT

Bastrop County—Failure: Continental's H. H. Young et al 1, 2270 fr sl 2900 fr wl 2410 fr el 777.3-ac lse, William Medford sur A-49, 3 mi sw Kirtley, abnd 4240 ft.

SOUTHWEST TEXAS WILDCAT

Starr County — Failure: Lawton Hedrick's M. M. Garcia 1, 330 fr w&sl 80-ac lse, 1427 fr wl 330 fr sl sur 949, 1 mi ne of Ross fld, so 2586-90, 2758-63 ft, abnd 2828 ft.

LOWER TEXAS COAST WILDCATS

Fayette County — Failure: Phillips' Cora Cockrill 1, 2402 fr nl 330 fr el 539-ac lse, J. Robinson sur, 3 mi sw of Cistern, abnd 3003 ft.

Jim Wells County—Failure: H. H. Howells' D. C. Perkins et al 1, 467 fr w&nl 80-ac lse, 5 mi ese of Alice, abnd 6009 ft.

Nueces County—Failure: Stanolind's Katherine Luby Shaffer 2, (OWDD) lot 8 blk 4 2700 w of well No 1, 7½ mi se Driscoll on 270.6-ac lse, Mary J. Luby subdvn Petronilla Rch, otd 5642 ft, abnd 8006 ft.

TEXAS GULF COAST WILDCATS

Matagorda County—Failure: Atlantic's Denman Kountze C-2, 330 fr wl 660 fr nl 150-ac lse and lot 12, H. Parker sur, W. Markham area, 1100 w C-1 dry hole, abnd 5650 ft.

Wharton County—Oil Discovery: Amerada's Chas. P. Daboval 1, 660 fr n&el 160-ac lse, sw¼ sect 72, ETRR sur A-495, 8 mi sw El Campo, elev 95 ft df, sand 7025 ft, perf 7025-28 ft, flow 80 bbls 36.7-gr, ⅛-in, td 7430 ft.

TEXAS GULF COAST NEW PAY TEST

Chambers County—N. Winnie Oil Discovery: Sun's W. L. Evans 1, 3357 s 330 w of nec J. N. Duran Lge 330 fr nl 330 fr el lot 11 blk 75 Wilson subdvn, 1155 sw Daugherty pool disc 1, elev 25.9 ft, 47 mln gas open flow, perf 68 shots 9434-51 ft, flow 61 bbls 49.3-gr cond, 3½ mln gas, 12/64-in, td 10,700 ft.

EAST TEXAS BORDER COUNTIES WILDCAT

Harrison County—Failure: Roger Lacy's Verhalen Nursery 1, 1700 fr nl 659 fr wl 147-ac tr or 7200 fr nwl 2380 fr swl Aaron Poe sur, elev 415 ft, Winona 1988 ft, Blossom 2390 ft, Paluxy 3357 ft, Pettit 5225 ft, Travis Peak 6500 ft, abnd 6728 ft.

EAST TEXAS WILDCAT

Bowie County—Failure: Stewart Oil Co.'s A. E. Stewart 1, 1050 ft snl 1440 ft wel of M. D. Ellis sur A-189, Pecan chalk 392-850 ft, Blossom 1075 ft, Sub-Clarksville 1615 ft, Woodbine 1740 ft, abnd 1990 ft.

NORTH TEXAS WILDCATS

Archer County—Oil Discovery: A. P. Kouri et al (was Elmer Frerich's) W. A. Keyes 1, 1208 ft wel 980 ft nsl of e-120 ac of J. M. Swisher sur A-396, elev 1131 ft, pump 8 bbls oil, 2 bbls wtr, sand 1114-19 ft.

Clay County—Failure: L. T. Burns et al's Gilbert 2, 330 ft nsl 167 ft ewl of C. Thompson sur A-445, elev 1099 ft, abnd 4078 ft.

Cooke County—Failure: Chester A. Martin et al's Wylie 2, 4200 ft ewl 3000 ft snl Thos. Cook sur A-258, abnd 400 ft.

Jack County—Failure: Ralph Harper et al's B. Flowers 1, 2406 ft nsl 2320 ft wel of E. M. Sanders sur A-534, abnd 3249 ft.

King County — Failure: Shamrock O&G Corp.-Roeser-Pendleton's Masterson 1, 1980 ft snl 660 ft ewl sec 20, J. R. Johnson sur, elev 1840 ft, lime 3575 ft, Mississippi 6495 ft, Ellenburger 6810 ft, abnd 6826 ft.

Wichita County: R. J. Rodocker et al's Westmoreland Park 1, 450 ft wel 250 ft nsl of sec 6, J. Scott sur, s of Wichita Falls, lcn 700-ft cable test.

Wise County: R. B. Campbell et al's F. F. Kaker 1, 330 ft e 100 ft s of nec of W. C. Harris sur A-400, but in Rebecca Coleman sur A-155, se edge Bridgeport, lcn 4000-ft rotary test.

WYOMING WILDCAT

Park County — Discovery: Husky Refining Co.'s Krampert-Unit 1, ne sw nw 23-51n-102w, Half Moon, swabbed 35 bbls 16-gr oil fr lower Embar 3425-3455, Embar 3365, Tensleep 3550, Amsden 3905, Madison 3920, td 4265 ft, pb 3512 ft.

WESTERN CANADA WILDCAT

Southern Alberta Plains — Taber Failure: Imperial Oil's Imperial-Hudson Bay-Barnwell 1, lsd 15 8-9-17w4th, abnd 3355 ft.

United States Wildcat Starts

ARKANSAS

Miller County: Atlantic's Montana Realty Co. 1, 660 n 1980 w of sec 17-17s-28w, bldg roads.

Washington County: Plymouth Oil Co.'s R. H. Williams 1, 990 fr sl 330 fr wl 24-13n-30w, lcn.

CALIFORNIA

Kern County: Lumpkin-Taylor Assoc.'s No. 1, sw 16-30-29, Edison area, lcn.

General Pet. Corp.'s Sunset 33-B-2, nw 33-22-24, Midway Sunset area, lcn.

Beatty-Steele's Beatty-Steele 1, sw 29-27-28, Mt. Poso area, lcn.

Richfield's Cauley 1, sw 36-30-29, Mt. View (Weed Patch) area, lcn.

Los Angeles County: Bishop-Hilo's Lapworth 1, N. Whittier Heights, 4-2s-11w, lcn.

Orange County: Mid-Cal. Pet. Co.'s No. 1, Santa Ana Canyon, lcn in se 24-3s-9w, lcn.

Stanislaus County: Continental's Azevedo Comm. 1, sw 27-4s-7e, lcn.

Sutter County: Buttes Oilfields, Inc.'s Buttes-Ward 1, sw 2-15n-1e, Marysville Buttes, Sutter County gas test, lcn.

COLORADO

Rio Blanco County: Wallbank & Privett's Gov't. 1, se sw sw 21-3n-88w, Poose Creek, lcn.

FLORIDA

Monroe County: American Republics Corp.'s State 1, 11,880 fr nl 500 fr wl twp 59s-40e in Card Sound, prep to move in.

ILLINOIS

Clark County: L. D. Kling's Blakeman 4, se sw sw 7-9n-14w, lcn.

Clinton County: Northern Ordnance's Payne 1, se se ne 3-2n-2w, dr 217 ft.

Effingham County: Frank Mitchell's Ruhull 1, se se sw 36-9n-6e, lcn.

Shulman Bros. et al's Loveless 1, nw ne sw 20-8n-4e, lcn.

Fayette County: Deep Rock's Albert 1, se se nw 33-5n-1e, lcn.

Franklin County: Central P L Co.'s Rose 1, se ne se 4-5s-3e, lcn.

E. S. Adkins' Peabody Coal Co.'s 1-E, ne ne sw 14-7s-3e, dr 374 ft.

Deep Rock's Kirk et al 1, ne se se 15-7s-4e, lcn.

Gallatin County: C. E. Brehm's Oldham 1, ne ne nw 24-9s-9e, lcn.

Hamilton County: Magnolia's Haas 1, nw nw sw 16-4s-6e, lcn.

Jefferson County: Harry Sherman's Jefferson O&G Co. 1, se sw ne 30-3s-2e, lcn.

Lawrence County: Clark Nye's Tracy 1, nw nw ne 4-2n-12w, lcn.

Montgomery County: Northern Ordnance's Deens 1, sw sw nw 26-7n-4w, lcn.

Northern Ordnance's Shenck 1, sw sw se 15-8n-4w, lcn.

INDIANA

Iroquois County: Miller Oil Co.'s Rupright 1, ne ne 31-28n-13e, lcn.

Montgomery County: Texas Co.'s Nugent 1, se ne sw 3-9n-5w, lcn.

KANSAS

Barton County: Vickers' Bortz 1, se ne nw 32-17s-11w, lcn.

Comanche County: United Carbon et al's Boisseau 1, c se nw 27-31s-18w, dk.

Ellis County: Texas Co.'s Elmore 1, se se sw 35-15s-20w, dr 780 ft.

Foard County: Texas Co.'s Thomas 1, se ne nw 33-27s-23w, lcn.

Harper County: Pure's Meyer 1, se nw ne 4-35s-6w, c&p.

Kiowa County: Gulf et al's Mitchell 1, c sw se 20-27s-16w, lcn.

Leavenworth County: Mosbacker's Sloan 1, swc ne 16-9s-22e, dr 810 ft.

McPherson County: Coralena's Jacobson 1, nw se nw 29-17s-2w, c&p.

P. G. Reynolds et al's Goerug 1, nw se nw 27-21s-2w, lcn.

Pratt County: Anderson-Prichard's Schroeder 1, ne ne sw 33-28s-11w, lcn.

Rice County: Wood River O&R Co.'s Gray 1, sec ne 11-19s-8w, mim.

Sedgwick County: British-American's Petrie 1, nw ne sw 36-26s-1w, lcn.

Beech Aircraft's Cartwright 1, sw ne ne 21-28s-2e, mist.

Stafford County: Darby-Bothwell's Gilmore Est 1-A, sw sw se 29-23s-14w, lcn.

KENTUCKY

Henderson County: Sinclair Prairie's Humphrey 2, 6-P-21, lcn.

Webster County: Ross Bartmes' Hammock 1, 17-N-23, lcn.

NORTH LOUISIANA

Catahoula Parish: Sinclair Prairie's Gabe Fisher 1, c ne nw 26-9n-6e, lcn Wilcox test.

Sinclair Prairie's Webb 1, c ne ne nw 10-8n-5e, lcn Wilcox test.

MICHIGAN

Allegan County: J. W. Lang Co.'s Kleinheksel 1, nw se se 22-4n-15w, lcn.

Bay County: Walton and Stewarts' Agnor 1, ne ne nw 27-18n-3e, lcn.

Ionia County: C. W. Ramsey's Nummer 1, nw se nw 6-6n-8w, rig.

Midland County: Daily Crude Oil Co.'s Nunn 1, w½ se nw 7-16n-2w, rig.

Muskegon County: Jacob Bolema's Medendorp 1, se se nw 24-11n-16w, lcn.

Oceana County: Sinclair Wyoming's Vaughn 1, nw nw se 7-15n-15w, lcn.

Van Buren County: W. H. Clock's Gannet 1, sw nw 19-3s-14w, dr.

MONTANA

Liberty County: Texas Co.'s State 1, nw se sw 26-29n-6e, South Chester area, lcn.

NEBRASKA

Garden County: Sinclair Prairie's Delatour 1, swc 33-19n-42w, lcn.

Hitchcock County: Texas Co.'s Egle 1, se se sw 29-4n-35w, dr 420 ft.

NEW MEXICO

Eddy County: W. R. Mackenzie et al's Cook & Ironside 1, sw se nw 8-20s-29e, spud.

Lea County: A. W. Cherry & Barron Kidd's Carder 1, c ne se 21-19s-33e, lcn 3600-ft test.

OKLAHOMA

Beckham County: Phillips' Nanee 1, sw se nw 8-7n-25w, rur.

Cleveland County: Gulf et al's Price 1, ne se 17-9n-3w, lcn.

Logan County: Sinclair Prairie's Harp 1, nw sw se 28-18n-2w, woc.

Love County: Gulf's Benson 1, nw sw 29-7s-3w, lcn.

Magnolia's Stewart 1, sw sw 7-7s-3e, lcn.

Noble County: Summitt Drlg.'s Barto 1, se sw 10-20n-1w, dr 2210 ft.

Oklahoma County: Kerlyn-Phillips' Classen 1, nw se 22-12n-4w, rig.

Pawnee County: Johnson O&R Co.'s Brayson 1, sw sw 23-21n-5e, dr 120 ft.

Keener O&G Co.'s Maitlen 1, nw ne ne 17-23n-3e, rig.

Seminole County: H. W. Shaw's Logsdon 1, ne nw se 32-5n-6e, spud.

Tillman County: Texas Co.'s Smith 1, nw se 36-2s-18w, lcn.

WEST TEXAS

Andrews County: Stanolind's Midland Farms Co. 1-L, c se sw G&MMB&A Co. 36, blk 41, T-1-S, lcn San Andres test.

Crane County: Gulf's W. D. Harris 1-A-E, c e¼ of w¼ H&TC Ry. 7, blk 6, lcn Ellenburger test.

Sun's J. B. Roberdau 1, c e¼ of e¼ H&TC Ry. 19, blk 35, lcn Ellenburger test.

Dawson County: Texas Co.'s Higginbotham Trust Co. 1, 660 ft out nwc labor 16, Lge 279, Hutchinson CSL sur, lcn San Andres test.

Pecos County: G. F. Aldrich et al's Barnes-Shell 1, 2310 ft fr sel 330 ft fr nel H&GN Ry. 138, blk 10, sp on 1800-ft cable test.

Bryce McCandless et al's Cordova Union-Atlantic 1-115, se ne se H&GN Ry. 115, blk 11, lcn 1800-ft cable test.

Reagan County: Woodley Pet. Co.'s E. R. Knolle 1, c sw nw T&P Ry. 47, blk 36, T-5-S, lcn San Andres test.

SOUTHWEST TEXAS

Duval County: R. F. Schoolfield's M. G. Peal 1, 330 n 1630 fr wl J. B. Peal sur 790, 2½ mi w of N. Kohler fld, ru.

Starr County: Charles Rider's A. M. Kelsey 1, 330 fr ne&nwl BS&F sur 125, 4 mi nw of El Sauz, mi&ru.

T. E. Stephens' M. Hinojosa Est. 6, 2100 e 2000 n of Magnolia's Hinojosa 1, Santiago de la Garza Heirs porcs 110, dr 600 ft.

Sun's J. G. de Garza et al 1, 467 nw of m/ely/sel 1100 ne of m/nly/swl 766-ac lse tr B-1 sh 11, La Sal Colorada gr, 42 mi n of Rio Grande City, lcn 6250-ft test.

LOWER TEXAS COAST

Karnes County: Chas. Harris' P. and M. H. Byram 1, 330 fr nwl 830 nel 132-ac tr in Carlos Martinez sur A-6, lcn.

Live Oak County: Henderson Coquat's Albert West 1, 890 fr nwl 940 fr swl tr 65 Kittie subdvn, M. Caronick sur 35, lcn.

Nueces County: Blanco Oil Co.-Al Buchanan's Luling Foundation 1, 330 fr e&sl 156.1-ac lse, F. Z. Bishop subdvn of Palo Alto Gr, 44 mi nw of Bishop, lcn 8000-ft test.

Sun's F. D. Bancroft 1, 660 fr s&el Cuadrillo Co. sur 138 and 80-ac lse, lcn 10,000-ft test.

San Patricio County: Drlg. & Exploration Co.'s W. F. Lovell 1, 1660 fr wl 467 fr sl sect 7 320-ac lse, Geo. W. Peal subdvn of S. J. Welder Rch, 8 mi n of Leroy, lcn.

TEXAS GULF COAST

Brazoria County: S. A. Brewster-W. O. Bartle's M. I. Mellon et al 1, 467 fr s&wl of 866-ac lse, Thos. Alsberry sur, 2 mi wsw of Lockridge fld, lcn 8500-ft test.

Ft. Bend County: L. H. Wentz's J. R. Farmer 1, 330 fr nl 2310 fr el 528-ac lse, I&GN sur A-353, lcn 8500-ft test.

EAST TEXAS

Henderson County: Pete N. Wiggins and C. Ed. Hyde's T. P. Faulk-M. Coleman 1, 990 ft out nwc 80-ac tr and A. W. Brown sur, lcn Woodbine test.

NORTH TEXAS

Archer County: D. H. Bolin et al's Bill

Threet 2-A, 150 ft out swc blk 106, Jefferson CSL sur, lcn 1150-ft rotary test.

Fortex Oil Corp. et al's L. F. Wilson 1, 1320 ft n 330 ft w of nec ATNCL sec 100, but in subdvn 206, Geraldine Townsite subdvn, lcn 1650-ft rotary test.

George Proctor et al's J. D. Powell 1, 2310 ft nsl 350 ft wel of H. A. Allen sur A-3, lcn 2000-ft rotary test.

Texas Co.'s H. Harrison 1, c sw nw TE&L Co. sec 1846, rig for 6000-ft Ellenburger test.

Archer County: L. T. Burns et al's J. M. Powell 5-A, unnamed shallow pool new pay test, 440 ft out nec blk 116, John W. Harris subdvn, lcn 2850-ft Canyon rotary test.

Young County: John W. Harris et al's J. L. Rhodes 1, 330 ft out nwc of J. S. Fore sur A-1309, lcn 4700-ft test.

Moran & Sons' R. Campbell 1, 150 ft out swc of sec 1463, TE&L Co. sur, lcn 1000-ft test.

TEXAS PANHANDLE

Sherman County: Phillips' E. Elliott-Ezra 1, 2534 snl 2535 ft ewl GH&H Ry. 198, blk 1-C, 3 mi s Oklahoma line, lcn 7000-ft test.

WYOMING

Carbon County: Cameron & Allen's 1, nw nw nw 24-21n-88w, West Rawlins district, lcn.

Crook County: Williams Brothers Corp.'s Gov't 1, nw nw sw 15-55n-67w, Huelett structure, 3500-ft Madison test, lcn.

Hot Springs County: Husky Refining Co.'s Gov't. 1, ne ne ne 28-43n-95w, Cedar Ridge, lcn.

Natrona County: Texas Co.'s Clark 1, ne ne sw 35-33n-82w, Oil Mountain, Madison test, lcn.

Sweetwater County: Mtn. Fuel Supply Co.'s Unit 1, cel se sw 18-13n-99w, Alkali Creek, lcn.

WESTERN CANADA

Alberta Foothills Belt—Nordegg: Arrow Oil Co. and Brazeau Oil Co.'s Arrow-Brazeau 1, se¼ 9-41-15w5th, lcn.

Southern Alberta Plains—Birdsholm: California-Standard's Birdsholm-Province 1, ne lsd 14 33-4-11w4th, ru.

Tempest: Imperial Oil's Imperial-Tempest 1, sw lsd 4 27-9-19w4th, ru.

Rusylvia: William G. DeKoch's Iscris-M 1, ne lsd 8 2-54-6w4th, lcn.

☆

TOM J. MURPHY, JR., land department employe of The Texas Company, has been transferred from Fort Worth to Midland, Texas, as scout in the West Texas district, succeeding E. H. Gaither, resigned.

AMBROSE MICHAEL DONOGHUE, 64, manager of the crude oil purchasing and sales division of The Texas Company since 1928, died October 16 in Houston. Son of a pioneer Pennsylvania oil man, Donoghue entered the industry at 17 as clerk for the Oil Well Supply Company in Bradford, Pennsylvania, and joined The Texas Company in Beaumont in 1903. He served the company continuously since that time, being the oldest employee in point of service at time of his death, and was president of the Old Timers Club in 1943.

B. M. BROWN has been named manager of the petroleum and chemical section of Westinghouse Electric and Manufacturing Company, succeeding Q. M. Crater, who was transferred to the Detroit office of the industrial department as assistant manager. Except for a short time with the Pomona Pump Company, Pomona, California, Brown has been with Westinghouse since 1941.

ADVERTISING RATES

TRADING POST SECTION

Regular classified advertisements for this special section, set in type this size without border, take flat-rate of 7 cents per word for the first insertion and 5 cents per word for each subsequent insertion of same copy. Display advertisements for this section, set in suitably larger type with ruled border, are $5.00 per inch for the first insertion and $4.00 per inch for subsequent insertions. Remittance must accompany copy which should be sent to:

Trading Post Section, The Oil Weekly
P. O. Box 2608 Houston 1, Texas

The OIL WEEKLY'S TRADING POST

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CLASSIFIED ADS . . . EQUIPMENT . . . SERVICES . . . PERSONNEL

SITUATIONS WANTED

AVAILABLE TO A PROGRESSIVE ORGANIZATION

Executive

20 years with major oil companies. Manager of Purchase and Store departments. Management engineering, field store auditing. Background of practical field work. For the past 2½ years have held responsible posts concerned with procurement for the Armed Forces.

Address:
Box 19, c/o The Oil Weekly, Houston, Texas

FOR SALE

FOR SALE
New and Reconditioned Iron & Steel
VALVES
Tested and Guaranteed
LARGE STOCK OF FITTINGS
APEX IRON & METAL CO.
2204 S. Laflin St. Chicago 8, Ill.

■ About 28,000-acre block So. Ga. leases for sale. Send or come and investigate. Owners care box 364, Waycross, Ga.

DRILL PIPE FOR SALE

9,000 feet 3½" O.D., Range 2, Drill Pipe with Hughes Acme Regular Tool Joints.
4,200 feet 3½" O.D., Range 1, Drill Pipe with Hughes Acme Regular Tool Joints.
6,600 feet 2⅞" O.D., Range 1, Drill Pipe with A.P.I. Full Hole Tool Joints.
Located in Houston.
Telephone J-2-1466 or T-6268, P. O. Box 1261, Houston, Texas.

HELP WANTED

■ WANTED: Experienced mechanical designing engineers by company established over fifty years. Increased demand for our products has created need for additional permanent engineering organization. Prefer graduate engineers with practical training in design and use of drilling and other machine products related to petroleum industry. Salary commensurate with experience and ability. State age, education, experience, record by consecutive dates for past ten years, references. No references will be contacted before personal interview. Address: Box 20, c/o The Oil Weekly, Houston, Texas.

■ WANTED: Salesmen for cable tool drilling equipment, preferably men with some drilling experience. Salary and commissions with traveling expenses paid. Permanent position. Give age, experience, education and references as well as history of employment for past ten years. No references will be contacted without your authority. Address: Box 21, c/o The Oil Weekly, Houston, Texas.

■ The Eastman Oil Well Survey Company has a Field Sales and Service position open in the Oklahoma area. Applicant must have good knowledge of and be well acquainted in the oil well drilling industry in this area. Attractive salary. Expenses and car furnished. Please mail written application to Post Office Box 1108, Oklahoma City. Replies held confidential.

BUSINESS OPPORTUNITIES

■ CAPITAL SEEKERS: Interested in raising $25,000 or more should write to Amster Leonard, Fox Bldg., Detroit 1, Michigan.

LEASES, DRILLING ACREAGE, ETC.

■ FOR LEASE: 16,000 acres all one ownership in Eastern Leon County. Also 5,000 acres N. W. Anderson County, Texas. Both will be new ten-year Commercial Leases. W. B. Worthen, Box 84, Winnsboro, Texas.

NOTICES

■ GEORGIA OIL REPORTS: 6 mo. sub. $6. Get posted. Keep posted. Also Base and County maps So. Ga. and North Fla. C. W. Deming, Waycross, Ga.

UNITED STATES GOVERNMENT OWNED SURPLUS WAR PROPERTY

Defense Plant Corporation, a subsidiary of Reconstruction Finance Corporation, will receive sealed bids up to 2:00 PM, November 2, 1944 and then publicly open for

THREE MODERN 125 IDEAL, 12,000 FOOT POWER DRIVEN DRILLING RIGS

located at Engineer Sub-Depot, San Bernardino, California.

Defense Plant Corporation reserves the right to reject or accept any or all bids submitted.

An ample supply of drill pipe and spare parts are available at OPA ceiling prices. Successful bidders for the rigs will be given first opportunity to purchase these items.

Bid forms, conditions and terms of sale may be secured and arrangements made for inspection of this property by communicating with Reconstruction Finance Corporation, Surplus War Property Division, Pacific Mutual Building, Los Angeles 14, California.

Squeaks from the Bull Wheel

A "Highland Crabologist" Writes About an Oil Well

To J. Brian Eby, Houston geologist, thanks for an account of a country newspaper correspondent's impression of a wildcat well in Mississippi:

"Having heard that an oil well was being drilled on lower Big Level, and having seen hundreds of truckloads of paraphernalia and equipment going by in that direction, and having heard the rattle of machinery down that way for a month or more, and not having seen anything in print about such an enterprise and feeling that Big Level was being cheated out of her share of the publicity of the oil business, we journeyed down there on last Sunday to investigate and report our findings to the Herald. We found the oil field located in a corn field just on the west side of the old City road opposite the King Bee farm. Failing to see anyone who looked like he was in authority to talk to we approached the fireman on one of the big boilers on the ground and amid the whir and noise of machinery tried to make our desires known. He acted as though he was hired to fire that boiler and above that his duties were to know nothing and to keep his mouth shut about that. We managed to tell him that we were a newspaper man and wanted answers to two or three questions, the balance we could see for ourself, it being on top of the ground. We ended the interview by telling the young man that we guessed that we could guess at enough to answer our purpose.

"We learned that the Harry Morgan outfit is doing the drilling, but who the hole will belong to when finished we do not know. According to the best information we could get the well was down 8000 feet or more, but not being a minerologist or a geologist, but only a highland Crabologist, we could not tell whether the indications for oil were favorable or not. The work goes on day and night, Sunday and all. And what we cannot understand is why they are in such a hurry. If there is oil down there we guess it will stay there until they get to it."

BE SURE TO CHECK . . . .

Trading Post Section

ON PAGE 85 OF THIS ISSUE

Because of the scarcity of certain types of new equipment and the fact that some operators may have a surplus of some items and a serious shortage of others, this **Used Equipment Forum** is performing a valuable service to operators in locating needed used materials or disposing of surpluses that may be needed by others.

Standco
NO-SMOKE
STANDCO BRAKE LINING
Is the driller's best friend because it makes the easiest brake known and "feeds off" evenly while drilling. It never scores brake rims. See page 2808 Composite Catalog.
Standco Brake Lining Co.
HOUSTON

HOUSTON LABORATORIES
Analytical and Consulting Chemist
Podbielniak Gas Analysis
Oil Field Brines, Waters and Cores
Complete Evaluation of Crude Oils
Long Distance 267, Box 132, Houston, Tex.

THE FORT WORTH LABORATORIES
Analysis of oil field brines, cores, gas, oil and minerals. Field gas testing. R. H. Fash, Vice President; Long Distance 136 823½ Monroe Street, Fort Worth, Texas

William M. Barret, Inc.
Consulting Geophysicists
Specializing in Magnetic Surveys
Contracts accepted for domestic and foreign projects, using the most improved instrumental and interpretative technique
GIDDENS-LANE BUILDING
SHREVEPORT, LOUISIANA

Add Lucky People—

A widow is a fortunate woman. She knows all about men and the men who know anything about her are dead.

Homey Hint—

When a girl sneezes, it's a sign she's catching cold, and when she yawns, it's a sign she's gotten cold.

Okay, Kiam—

There was once a maid from Siam,
Who said to her lover, young Kiam:
"If you kiss me, of course,
"You will have to use force.
"But, gosh, ain't you stronger than I am?"

Kitchy-koo—

"What do you mean I have the hands of a baby?"

"They're just beginning to creep."

Cute Cutup—

"I'm certainly cutting a fine figure," observed the chorus girl as she sat on a broken bottle.

Definitions—

Gentleman: A patient wolf.

Wolf: A slicker who takes out a sweater girl and tries to pull the wool over her eyes.

Definition

A female shopper is a woman who can hurry through a department store aisle 18 inches wide without brushing against the piled-up glassware, and then drive home and knock the doors off a 12-foot garage.

A Lohengrin—

"It won't be wrong now," hummed the young bride as she marched down the aisle.

Turnabout

"Let's do something different tonight."

"Okay. What?"

"You try what I usually try and I'll slap YOUR face."

No Beginner's Luck

"Why the black eye?"

"Well, it was the first time I was ever a judge at a beauty contest and I was forced to sort of feel my way around."

Success Secret

One way for a girl to be popular is to have blue eyes and greenbacks.

Definitions

Chivalry is that quality which makes a man want to defend a woman against every man except himself.

A shy girl is one you have to whistle at twice.

Poet's Nook

This is a funny world.
Its wonders never cease.
All civilized people are at war,
All savages are at peace.

Add Puns

Some people climb the ladder of success wrong by wrong.

Odd Ailment

"I hear your Uncle Pete died."

"Yeah. When he complained of a backache, the doctor rubbed him with alcohol and Uncle Pete broke his neck trying to lick it off."

Juicy Tidbit

First aid instructor: "What's the first thing you'd do if you got hydrophobia?"

Corporal: "Bite the first sergeant."

Short, Short Story

At 6 o'clock she laid out his dinner.

At 7 o'clock she laid out his suit so they could go out for the evening.

At 11 o'clock she laid out his pajamas.

At 3 o'clock he came home and she laid him out.

Celebration Later

Their cars having collided, Jock and Pat were surveying the situation. Jock offered Pat a drink from his bottle; Pat took one; and Jock returned the bottle to his pocket.

Said Pat: "Aren't you going to have a nip yourself?"

"That I am, but not until the police have been here."

Force of Habit

Sergeant: "Button up your coat, there."

Rookie: "Yes, dear."

Easy Does It

"I hear you fired your maid and are looking for another."

"Yes. I'm looking for one who won't handle china like Japan."

Time Effect

The new Army rifle is said to weigh 8.69 pounds. After it has been carried about three hours the decimal falls out.

Notes for the Equipment Buyer and User

General Service Gate Valve

W-K-M COMPANY

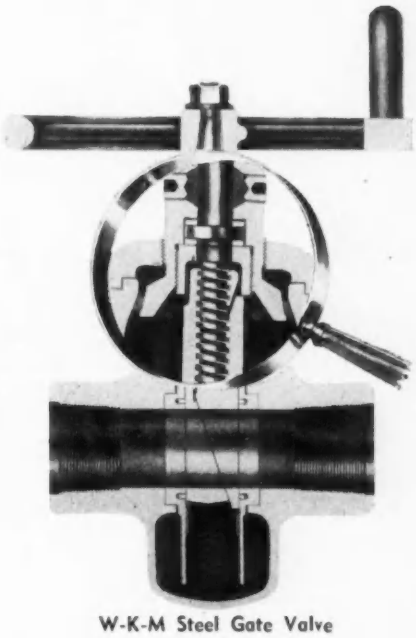
W-K-M Company, Houston, has perfected a steel gate valve for general service in the oil industry. Improved bonnet design, and a steel body and bonnet rather than cast-iron or semi-steel are said to be features of the valve.

No flanges, bolts or gland are required. Seal is effected inside the body by means of a double tapered ring between similar tapers on the upper inside of the body and the lower outer diameter of the bonnet. In assembly, the lower end of the bonnet is inserted in the body, and the sealing ring pushed down around the bonnet. Then when pressure is applied, the ring is wedged in place, forming a positive seal. No residual load is required to maintain the seal. A protector ring or bridge member is then screwed on the upper end of the bonnet to complete the assembly. Before the application of this ring, the joint may be inspected under the full test pressure. Thus internal pressure acts to make the seal more positive.

The area of the sealing ring is predetermined and requires no permanent deformation to form a seal. The greater the pressure, the tighter the seal becomes, since it is entirely self-adjusting to pressure and temperature changes.

The bonnet and ring are self-aligning. Other features of the valve include through conduit, full bore opening entirely through the valve, parallel expanding gate which assures a positive shut-off, oversize bronze, renewable seats which are not exposed to damage or wear in either open or closed position, and automatic lubrication attained by the utilization of body and bonnet as a reservoir for a supply of lubricant.

The valve is made in both 1600 and 1000-pound test pressure.



W-K-M Steel Gate Valve

Oil Well Supply Official Transferred to Dallas

Oil Well Supply Company, Dallas, announces transfer of Albert R. Zelt, ranking vice president, from Oil City, Pennsylvania, to Dallas.

Ralph W. Rager was named comptroller, and Byron Hinderer assistant comptroller. Rager replaces Russell M. Braund, whose transfer to American Steel and Wire Company, Cleveland, became effective Oct. 1.

Zelt, 44, formerly was vice president of Oil Well Supply Company in charge of manufacturing, with headquarters in Oil City.

Sales Office Opened

Industrial Supply Company, Wichita Falls, Texas, has opened a district sales office, 1015 Kirby Building, Dallas, under the direction of Barney McMullen. McMullen was formerly district manager for Republic Supply Company in the North Texas, Oklahoma and Louisiana district.

South American Official Named by Sterling Company

Sterling Engine Company, Buffalo, New York, has named Lieutenant Colonel Charles B. Whitehead its South American representative, with headquarters in Rio de Janeiro, Brazil.

He will also visit cities in Peru, Chile, Venezuela, Colombia, Ecuador and Bolivia. Until recently, he has been on active foreign duty with the United States Army Air Forces. Prior to the war, his business activities took him to Mexico, Central and South America, the Indies and Europe, as an executive in aviation, motion pictures and railroads.

Lubrication Specifications

American Gear Manufacturers Association, Empire Building, Pittsburgh 22, Pennsylvania, has released tentative AGMA standard specifications for lubrication of enclosed and open gearing including, helical, herringbone, straight bevel, spiral bevel, worm, hypoid, and spur. The specification covers the method of lubricating and the type and grade of oil to be used.

Opens Tulsa Office

J. H. Topper has been appointed district sales representative for the Lone Star Cement Corporation of New York which has re-established its office in Tulsa, to cover Oklahoma, southern Kansas and northern Texas.

Office Transferred

Wickwire Spencer Steel Company, 500 Fifth Avenue, New York 18, New York, has announced that the general sales office of the mechanical specialties division is now located at Clinton Massachusetts.

National Tube Firm Names Assistant to President

National Tube Company, Pittsburgh, Pennsylvania, announces appointment of Walter H. Wiewel as assistant to the president to engage in planning and development of future markets and facilities for production of tubular products.

Since 1942, Wiewel has served as chief of the Tubing Branch, Steel Division of the War Production Board, and also as vice chairman of WPB's Production Directive Committee.

Charles C. Crawford Heads A. M. Lockett Company

Charles C. Crawford, former vice president and secretary of A. M. Lockett & Company, Ltd., has been named president and secretary by the board of directors.

Crawford began work with the firm as a draftsman in the engineering department in 1903 and subsequently transferred to the sales department. He was manager of the company's Houston office from 1910 to 1918.

C. C. Crawford

A. M. Lockett, former president, has been made chairman of the board; R. P. Lockett, vice president, and Joseph E. Viguerie, treasurer and assistant secretary.

Course of Bore Hole Is Determined by New Book

To provide a speedy and accurate procedure of determining the course of a bore hole, the Sperry-Sun Well Surveying Company is offering tables which eliminate calculations.

These tables give the results for angles of inclinations in quarter degrees from 0 to 31 and in half degrees from 31 to 45 and in degrees from 45 to 55 for bearing angles in degrees ranging from 0 to 90.

They also give the values of the latitude and departure for each 100 feet course length and the true vertical depth for each angle of inclination. The tables also contain a section dealing with the correction of magnetic compass records.

These Latitude and Departure tables may be obtained from the Gulf Publishing Company, P. O. Drawer 2608, Houston 1, for $5 per copy.

Two-Cycle Engine Booklet

Clark Brothers Company, Inc., Olean, New York, has published a booklet describing the development of the two-cycle engine. Important improvements have given this engine wide application in the oil industry.

3 Ways in which

B and W, Inc.

Wall Cleaning Guides Give You a Good Cement Job

1 Eliminating Mud Cake—Direct abrading action of multiple spring wires removes mud filter cake from wall of hole and affords good contact between cement and formation.

2 Eliminating "Zone of Weakness"—Continuous centering of casing assures uniform thickness of cement. No "Zone of Weakness" where cement is dangerously thin.

3 Eliminating Fluid Migration—A good cement job assured by B and W Guides means low gas/oil ratio and a satisfactory completion without the need for expensive re-cementing.

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WEST COAST: 3545 Cedar Avenue
Long Beach, Calif. • Phone: L. B. 4-8366
GULF COAST: 305 M & M Building
Houston, Texas • Phone: Preston 9783

WILLIAM H. ATKINSON, consulting geologist of Oklahoma City who supervised the drilling of the field's discovery well, discussed the West Edmond pool, October 16, before Tulsa Geological Society.

WILLIAM F. MEISTER, for 30 years president of Pattin Brothers Company, died in Marietta, Ohio, October 2. Since purchase of the company by Acme Fishing Tool Company in 1942, Meister served as general manager of the Pattin Brothers Division and vice president of the parent company.

U. B. BOUCKE, vice president and controller of Tide Water Associated Oil Company, has been elected to the board of directors. Connected with Tide Water Associated for more than 23 years, Boucke fills the vacancy created by the resignation of George J. Hanks.

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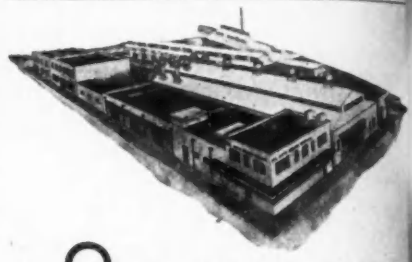

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